MULTI-CD/TUNER CONTROL
DSP DECK

OWNER'S MANUAL

Thank you for purchasing this PIONEER product. Before
attempting operation, be sure to read this manual.

Nous vous remercions d'avoir acheté cet appareil PIONEER.
Avant de l'utiliser, prendre soin de lire ce manuel.

Muchas gracias por la adquisición de este producto PIONEER.
Antes de tratar de operarlo, lea atentamente este manual.

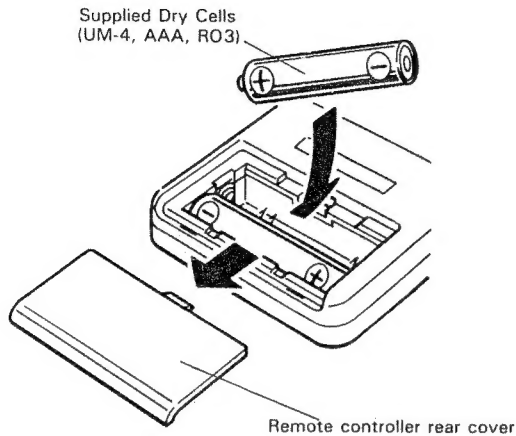شكرا لشرائك هذا المنتج من بايونير. قبل محاولة تشغيله تأكد من قراءة هذا
الدليل.

KEX-M900

♎ PIONEER®
The Art of Entertainment

Prepare the Remote Controller First
Loading Batteries

Supplied Dry Cells
(UM-4, AAA, RO3)

Remote controller rear cover

Precautions When Loading Batteries

Note the following precautions when loading batteries into the remote controller unit to avoid damage due to battery fluid leakage.

• Always check carefully that you are loading batteries with their ⊕ and ⊖ poles facing in the proper directions.
• Never mix old and new batteries. Always replace batteries with two new ones.
• Some batteries may appear to be identical but have different voltage ratings. Never mix battery types.
• Some batteries can be rechanged and some cannot. Be sure to carefully read the label for the batteries you use.
• To avoid damage to the remote controller caused by battery leakage, remove the batteries from the remote controller if you do not plan to use it for more than one month. If you find that fluid has leaked, thoroughly wipe out the battery compartment and load a set of new batteries.

Please Read the Following Before Using the KEX-M900
Using the Multi-Play CD Function

• This function requires connection to the separately available multi-play CD player.
• See the owner's manual of the multi-play CD player for instructions on the loading and removal of the CD magazine.

The Magazine Type Multi-Play CD players with ▨▨▨ mark and the Magazine with the same mark are compatible for 5-inch (12 cm) discs.
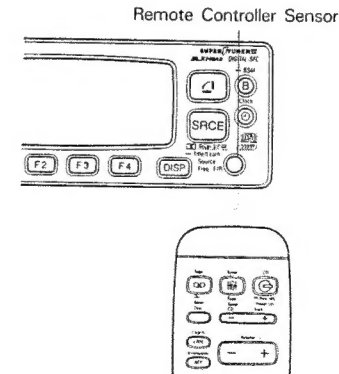
Receiving Radio Broadcasts

• The reception of radio broadcasts requires connection to the separately available FM/AM hide-away tuner.

Using the Remote Controller

Precautions

• Keep the remote controller unit in an area not exposed to long periods of direct sunlight.
• The remote controller unit may not operate properly if the transmitter of the remote controller unit is pointed towards the floor or the seat of the vehicle.
• Since the transmitter employs an infrared system, it may not operate properly while the car stereo is exposed to direct sunlight. In such a case, block the sunlight from the sensor and then perform the desired operation.
• If the remote controller fails to operate unless it is brought close to the unit, it may indicate that battery power is low. Replace the batteries in the remote controller.

Remote Controller Sensor

In the Event of A

Press the Clear Butt

If your unit exhibits abr
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indications, electrostati
built-in microcomputer.
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of wiring. Since pressi
have to make the respe
when the car's battery
requiring settings to be

KEX-M900

e multi-play CD

ructions on the

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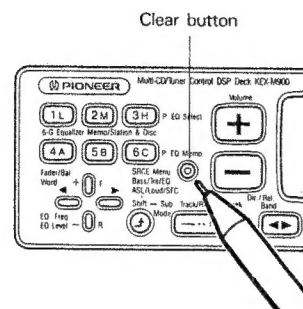case, block the
ation.
ose to the unit,
s in the remote

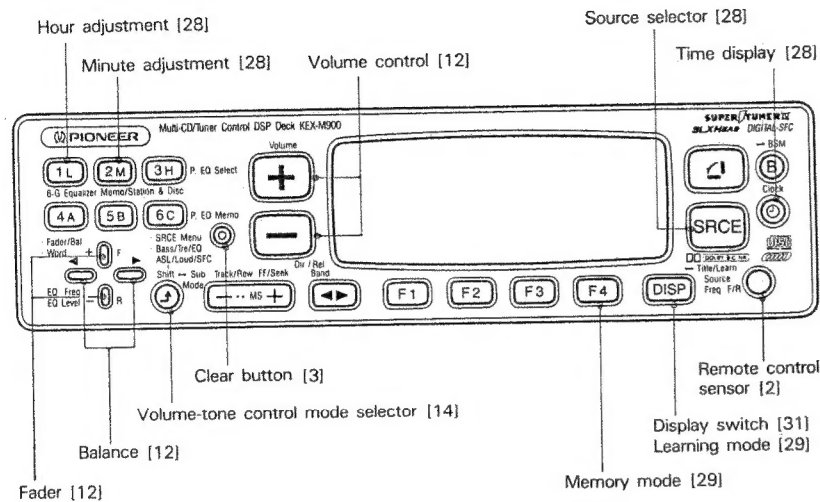## In the Event of Abnormal Operations

Clear button

Press the Clear Button

If your unit exhibits abnormal symptoms such as the failure of the unit to power on, the lack of operation even when buttons are pushed, or abnormal display indications, electrostatic noise may be adversely affecting the operation of the built-in microcomputer. Press the clear button with a thin pointed object, such as a pencil tip, when these symptoms appear, as well as after the completion of wiring. Since pressing the clear button erases all control settings, you will have to make the respective settings again afterwards. Settings are also erased when the car's battery is disconnected, as when replacing the battery, thus requiring settings to be made again after reconnection of the battery.
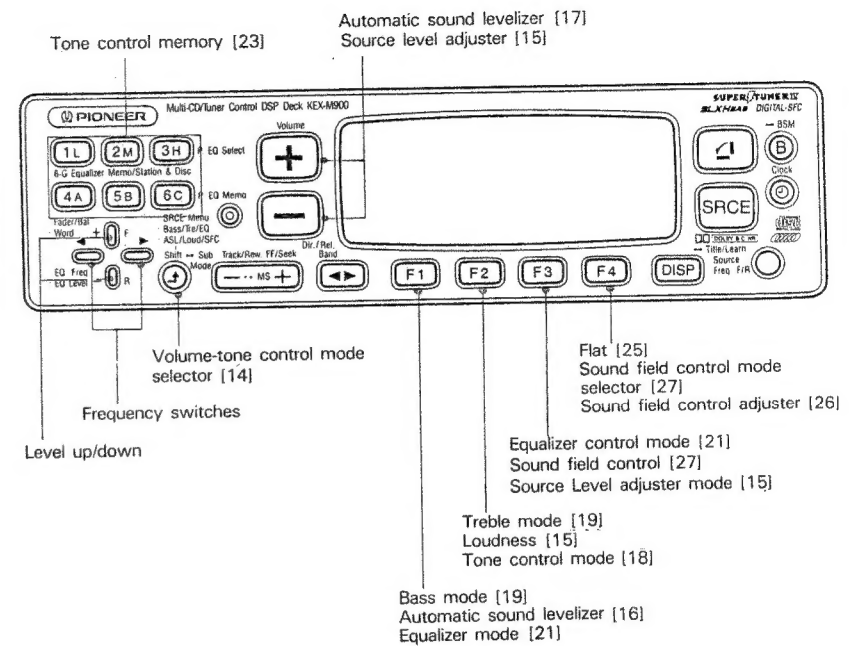
Parts Identification (Main Unit)

Common Parts 1

Hour adjustment [28]

Minute adjustment [28]   Volume control [12]

Source selector [28]

Time display [28]

Clear button [3]

Remote control sensor [2]

Display switch [31]
Learning mode [29]

Volume-tone control mode selector [14]

Balance [12]

Memory mode [29]

Fader [12]

Common Parts 2

Tone control memory [23]

Automatic sound levelizer [17]
Source level adjuster [15]

Volume-tone control mode selector [14]

Frequency switches

Level up/down

Flat [25]
Sound field control mode selector [27]
Sound field control adjuster [26]

Equalizer control mode [21]
Sound field control [27]
Source Level adjuster mode [15]

Treble mode [19]
Loudness [15]
Tone control mode [18]

Bass mode [19]
Automatic sound levelizer [16]
Equalizer mode [21]

Tape D

Fast forward,
[35]

Front panel in

4

Tape Deck

Source selector [28]

Front panel open [33]

Fast forward, Rewind/Music search [35]

Direction [34]

Blank skip [37]

Dolby B and C NR [36]

Radio intercept [36]

Repeat play [37]

Front panel interior

Front panel close [35]

Eject [34]

Close

Eject

Multi-Play CD Player

Disc number search [39]

Source selector [28]

Disc title control [42]

Track number search [39]
Fast forward/ Reverse [40]
Step number search [44]

Program erase [45]

Highlight scan [40]
Disc title control [43]

Program memory [43]
Program play [44]
Disc title control [43]

Fast forward/Reverse mode [40]

Repeat play/Random play [41]

Disc title [42]

• The multi-play CD playback function requires connection to the separately available multi-play CD player.

field control mode
[27]
field control adjuster [26]

mode [21]
rol [27]
juster mode [15]

For details, refer to the page number indicated in [ ].

Tuner

Source selector [28]

Best Stations Memory
(BSM) [48]

Preset buttons [47]

Tuning [47]
Local mode sensitivity
selector [50]

FM mono [51]

Seek/Manual Tuning selector [47]

Band selector [46]

Local mode [50]

Preset scan tuning [49]

Disc nur
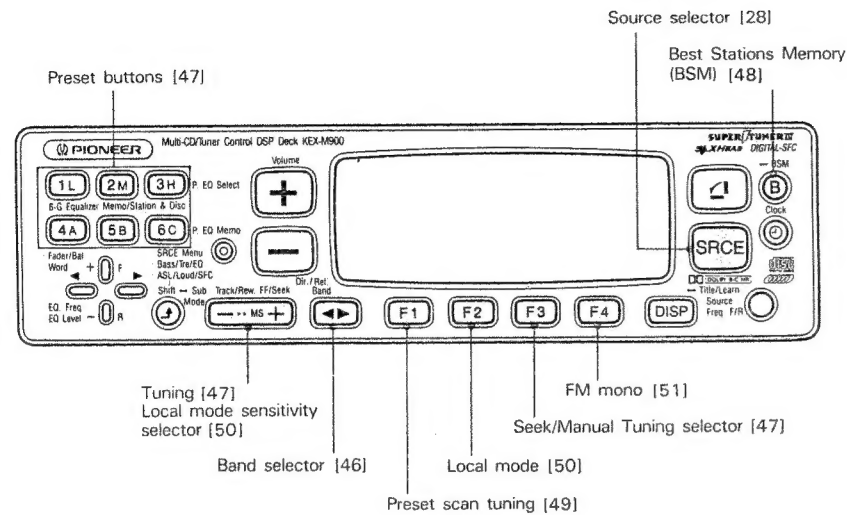
• The radio tuning function requires connection to the separately available
FM/AM hide-away tuner.

• The mult
  multi-pla

6

Parts Identification (Remote Controller)

Common Parts/Tape Deck

Tape ON/OFF [34]

Direction [34]

Learning button [29]

Attenuator [13]

Fast forward, Rewind/Music search [35]

Volume [12]

Multi-Play CD Player

Disc number search [39]

Multi-Play CD-ON/OFF [38]

Track number search [39]
Step number search [44]

- The multi-play CD play function requires connection to the separately available multi-play CD player.

Tuner

Radio ON/OFF [46]

Band selector [46]

Preset [48]
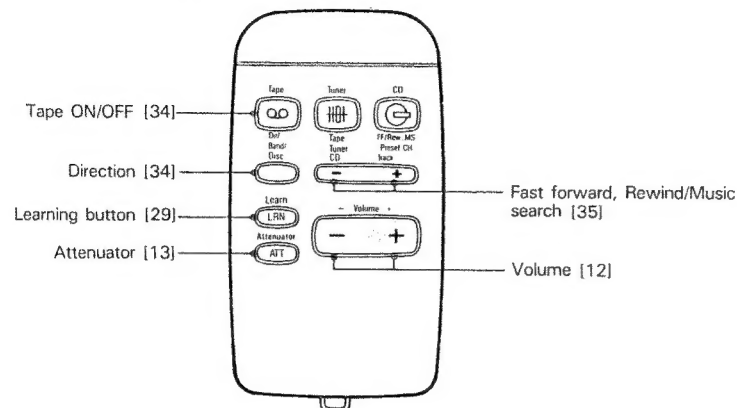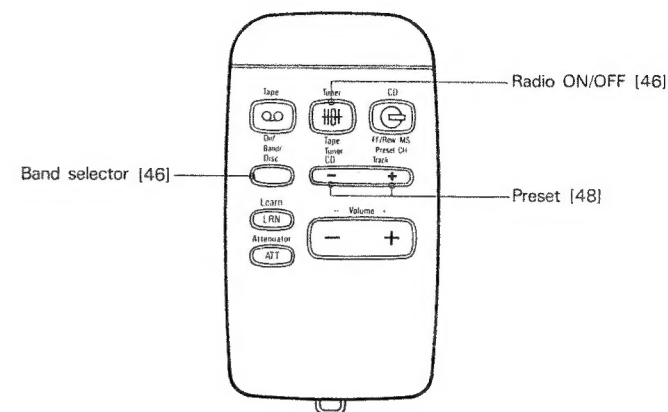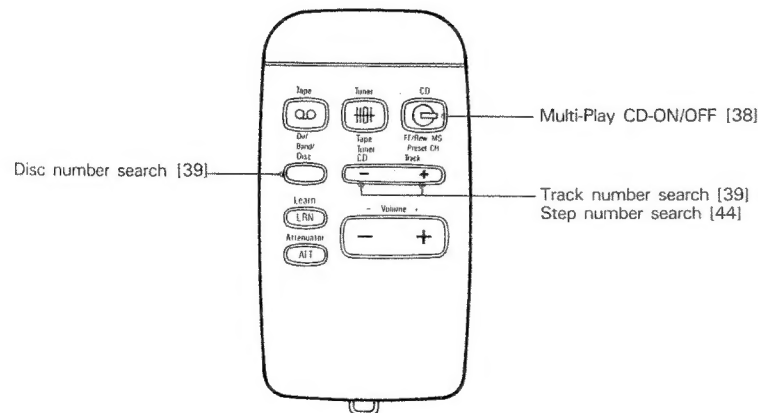
- The use of tuner functions requires connection to the separately available FM/AM hide-away tuner.

Parts Identification (Display)

Common Parts (Volume-tone Control Mode 1)

Operation indicator   Frequency characteristics

BAS
0

60 125 250 500 1k 3.5k 10k Hz

BASS   TREB   50   FLAT

Flat [25]

Equalizer control mode [21]

Treble mode [19]

Bass mode [19]

Common Parts (Volume-tone Control Mode 2)

Sound field control mode

TAPE
NOR   Stadium

ASL●
LOUD

Sound field control mode selector [27]

Sound field control [27]

Loudness [15]

Automatic sound levelizer [16]

Common Parts (Volume-tone Control Mode 3)

Source level adjuster display [16]

TAPE
NOR   VOL 0

Sound field control adjuster [26]

Source level adjuster [15]

Tone control mode [18]

Equalizer mode [21]

Tape Deck

Operation indicator

TAPE
NOR   Repeat Play

●MTL

Repeat play [37]

Radio intercept [36]

Blank skip [37]

Dolby B and C NR [36]

Metal tape [34]

Multi-Pla

Cur

• The mult
  available

8

indicated in [ ].

Multi-Play CD Player
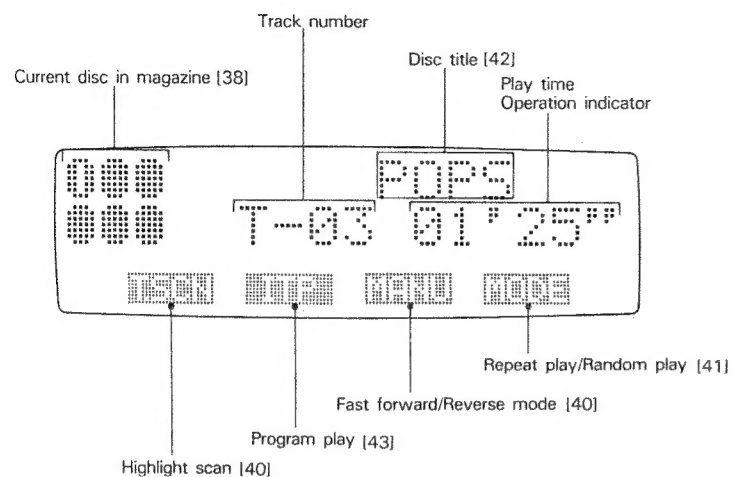
Track number

Disc title [42]

Current disc in magazine [38]

Play time
Operation indicator

ntrol adjuster [26]

```
DEE        POPS
EEE    T-03  01"25""
```

Repeat play/Random play [41]

Fast forward/Reverse mode [40]

Program play [43]

Highlight scan [40]

- The multi-play CD playback function requires connection to the separately available multi-play CD player.

Tuner

Band [46]   Preset number [47]   Frequency

```
TUNE.
FM-1  CH-3  107.5
```

Stereo [51]

FM mono [51]

Seek/Manual Tuning selector [47]

Local mode [50]

Preset scan tuning [49]
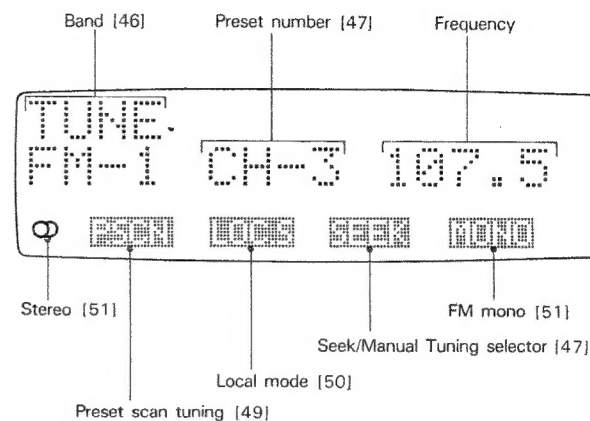
- Radio reception requires connection to the separately available FM/AM hideaway tuner.

[37]

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Using the Removable Front Panel

The front panel of this unit can be removed to prevent theft. Also, to prevent you from forgetting to remove the front panel, 5 seconds after the ignition is switched off, if the front panel is still attached, a buzzer will sound for a few seconds.

Detaching the Front Panel

1. Open the front panel.
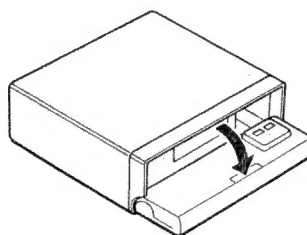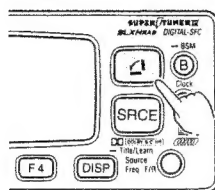
Note:
The front panel should be removed before turning the ignition off, or within 30 seconds after. If more than 30 seconds have elapsed since the ignition was turned off, detachment of the front panel is disabled.

2. While pressing the lock button, pull the front panel toward you.

Lock button
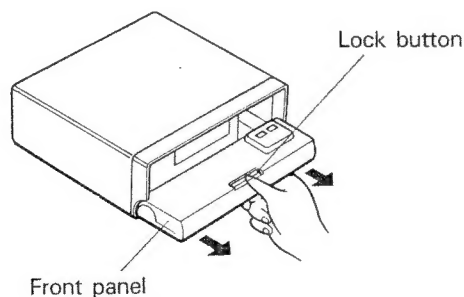
Front panel

Note:
Take care not to put pressure on the display or button, or drop the front panel.

3. Close the inner lid.
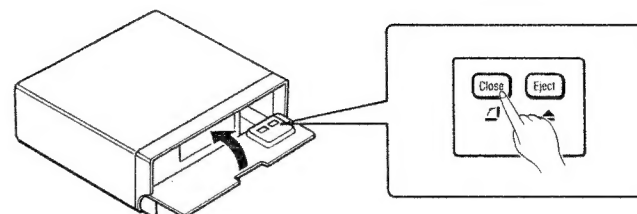
Notes:
• Be sure to close the inner lid after removing the front panel. This keeps out dirt, dust or other foreign matter that may be a cause a malfunction in the unit.
• When 30 seconds have elapsed after detaching the front panel, the close button stops operating, making it impossible to close the lid. For this reason, make sure to close the inner lid within 30 seconds after detaching the front panel. If the button becomes disabled, close the inner lid by hand.

4. Place the front panel in the supplied protective case.

Protective case
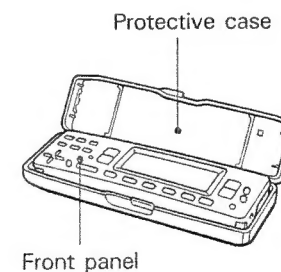
Front panel

Replaci
1. **Make**
2. **Press**

Notes:
• When r
buttons
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properly
Precautio
• Do not
to remo
• Do not
panel or
result in
other f
contacts

10

Replacing the Front Panel

1. Make sure the inner lid is closed.
2. Press the front panel against the main unit to reattach it.
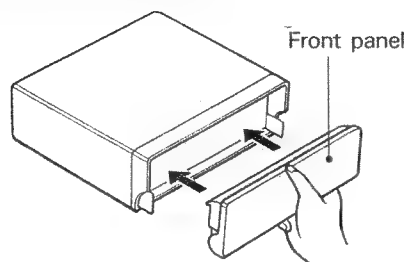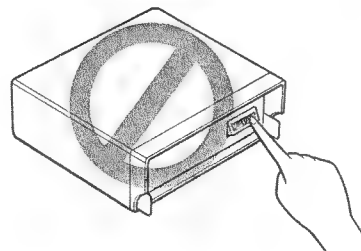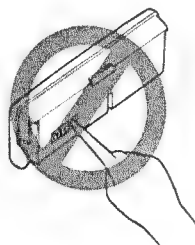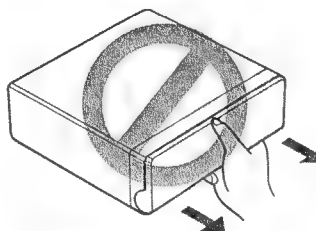
Front panel

Notes:
- When replacing the front panel, do not put pressure on the display or control buttons.
- The control buttons may not work properly if the front panel is not attached properly. If this occurs, gently press the front panel.

Precautions
- Do not force the front panel to remove it.
- Do not touch the contacts on the front panel or on the unit body, since this may result in poor electrical contact. If dirt or other foreign substances get on the contacts, wipe them with a clean dry cloth.

Precautions When Handling the Front Panel

- Do not leave the front panel in any area exposed to high temperatures or direct sunlight.
- Do not drop the front panel or otherwise subject it to strong impact.
- Do not allow such volatile agents as benzine, thinner, or insecticides to come into contact with the surface of the front panel.
- Never try to disassemble the front panel.

panel. This keeps out
nalfunction in the unit.
ront panel, the close
e lid. For this reason,
r detaching the front
lid by hand.

case.

Eject

11

Adjusting the Volume

- For details on tape listening, see "Using the Tape Deck" on page 33.
- For details on use of the multi-play CD player, see "Using the Multi-Play CD Player" on page 38.
- For details on use of the tuner, see "Using the Tuner" on page 46.

Volume Control

Maximum volume

Minimum volume

Min. 0 ◄─────────► Max. 30
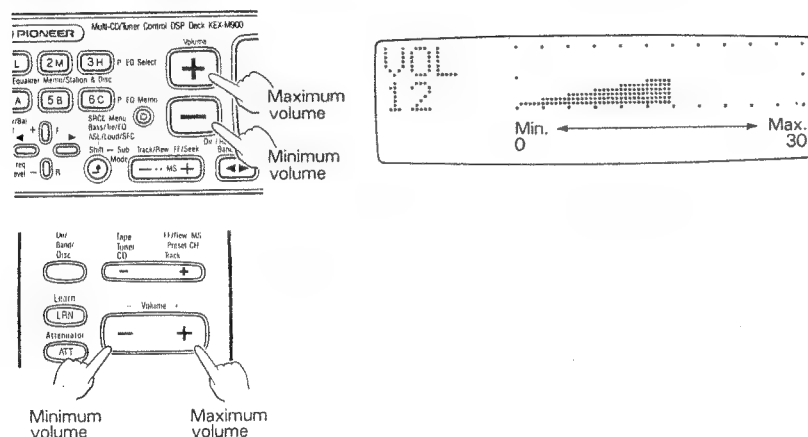
Notes:
- Always keep the volume inside the car at a level that allows you to hear outside sounds.
- Avoid high-volume listening for long periods while the car engine is off or idling since this may exhaust the battery.

Minimum volume   Maximum volume

Adjusting the Fader

Front F-9

Rear R-9

Front speakers

Rear speakers
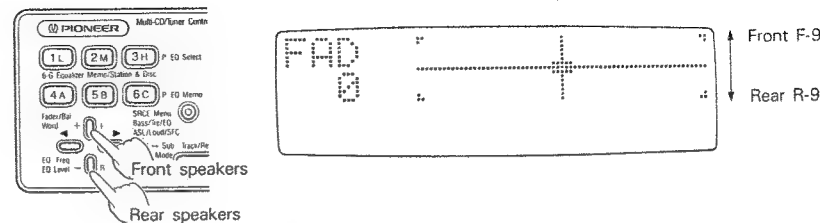
Notes:
- Since the fader control is disabled in volume-tone control mode 1, switch to another mode when using the fader control.
  [For details, see "Selecting the Volume-tone Control Mode" on page 14.]
- There are two ways to use the fader control: with the sound field control function on or off. [For details, see "Using the Sound Field Control" on page 27.]

Adjusting the Balance

Left   Right
L-9 ───────────────── R-9

Left   Right
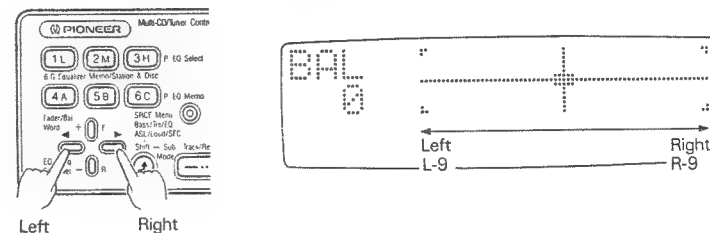
Note:
Since the balance control is disabled in volume-tone control mode 1, switch to another mode when using the balance control.
[For details, see "Selecting the Volume-tone Control Mode" on page 14.]

Lowering the V
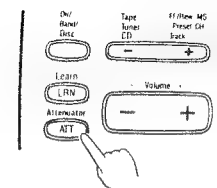
(Press again to resto
- This function can
- Although the ATT
  seconds, the atter

Lowering the Volume Instantly (Attenuator)

Front F-9

Rear R-9
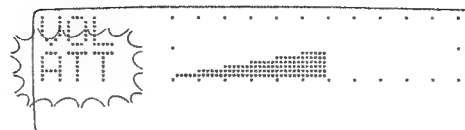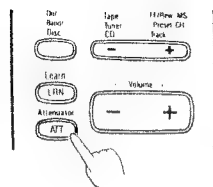
(Press again to restore the original volume level.)
- This function can only be performed using the remote controller.
- Although the ATT indication turns off after appearing on the display for 5 seconds, the attenuator will continue to function.

rol mode 1, switch to

Mode" on page 14.]
he sound field control
Field Control" on page

Right
R-9

rol mode 1, switch to

ode" on page 14.]

13

What are the Volume-tone Control Modes?

In addition to the F1, F2, F3, and F4 buttons (1) on the main unit for the tape, multi-play CD and tuner functions, there is also the volume-tone control button (2), which when pressed allows you to select any of three volume-tone control modes.

[See the next section for details on switching the volume-tone control mode.]

Note:
To use the tape, multi-play CD, or tuner function, first release the volume-tone control mode.
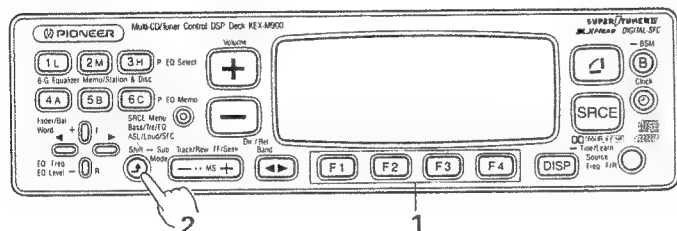
The Volume-tone Control Modes

Volume-tone Control Mode 1	Volume-tone Control Mode 2	Volume-tone Control Mode 3
PRESS TREB EQ FLAT	ASL LOUD SFC MODE	32BN FSR SLA F hd
F1 F2 F3 F4	F1 F2 F3 F4	F1 F2 F3 F4
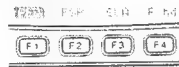
Releasing the Volume-tone Control Mode

Releasing the volume-tone control mode returns the unit to the previous source.

Multi-Play CD	Tape	Tuner
F1 F2 F3 F4	F1 F2 F3 F4	F1 F2 F3 F4

- For details on button operations, see the pages with the explanation of the respective functions.

Selecting the Volume-tone Control Mode

Specifying Mode 1 and Mode 2
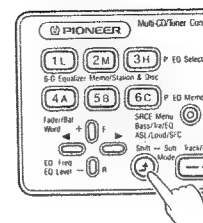
Mode 1
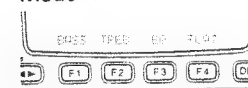
Mode 2
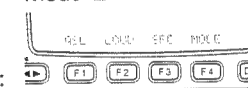
Press the buttons in the following sequence:

┌► Release ──► Mode 1 ──► Mode 2 ─┐

- Holding down the button for at least 2 seconds changes the unit to Mode 3.

Specifying Mode 3
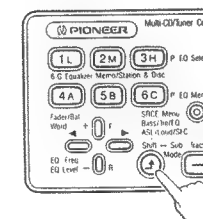
Mode 3

Hold down the button for at least 2 seconds.

- Holding down the button for less than 2 seconds switches the unit between Mode 1 and Mode 2.

Note:
If the next operation is not performed within 5 seconds after selecting to volume-tone control mode 3, the volume-tone control mode is automatically released. For this reason, the desired operation in the volume-tone control mode should be performed within 5 seconds after switching to mode 3.
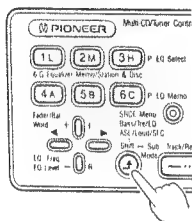
Using Lo

The loudnes
frequencies
1. Place t
[For details,

2. Specify

(Press again

Other Ways of Adjusting the Volume
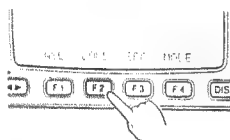
Using Loudness

The loudness function provides additional power to the low and high sound frequencies during low-volume listening.

1. Place the unit into volume-tone control mode 2.

[For details, see "Selecting the Volume-tone Control Mode" on page 14.]
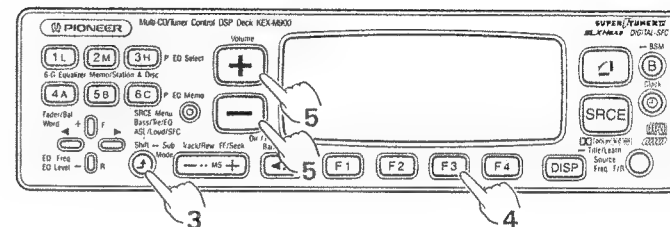
2. Specify the loudness mode.

LOUD ⟶ ▓▓▓▓▓

(Press again to release.)

Using the Source Levelizer Adjuster (SLA)

The source levelizer adjuster allows you to adjust for differences in volume, based on the FM volume level, after changing to the other sources (tape, multi-play CD, single-disc CD, FM, and AM).

1. Tune to an FM radio broadcast and adjust the FM volume level.

[For details, see "Using the Tuner" on page 46.]

2. Change the unit to tape playback.

[For details, see "Using the Tape Deck" on page 33.]

3. Place the unit into volume-tone control mode 3.

[For details, see "Selecting the Volume-tone Control Mode" on page 14.]
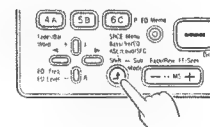
Hold down the button for at least 2 seconds.

**4. Specify the SLA mode.**

SLA ⟶ ▓▓▓▓▓
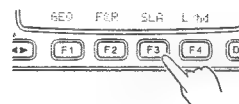
(Press again to release.)

Note:
If the next operation is not performed within 5 seconds after changing to the SLA mode, the mode is released automatically. For this reason, the next procedure should be performed within 5 seconds after pressing the button.

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5. Adjust the output balance.

Adjust the tape deck volume to make up the difference with the FM volume level.
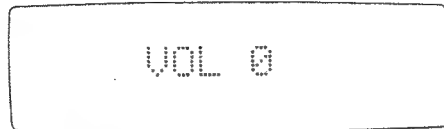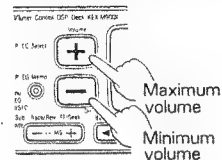
High VOL + 4
Low VOL − 4

6. Adjust the volume for the other sources.

Perform steps 3 to 5 for the other sources (multi-play CD, single-disc CD, AM), with the exception of the tape deck.

- Since the output balance control is based on the FM volume level, the FM volume level cannot be adjusted when an FM broadcast is being received. If the separately available hide-away tuner is not used in conjunction with the unit, use the volume level of the tape deck or CD player as the basis for adjustment.
- For details on the use of the tape deck, CD player, or FM/AM listening, see the pages with their respective explanations.

Using the Automatic Sound Levelizer (ASL)

The Automatic Sound Levelizer monitors the noise level inside the car, which changes according to the car speed and road conditions, and automatically increases the volume when the noise increases. You can select one of three different ASL intensities (increases in volume according to noise inside the car).
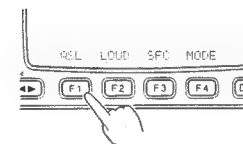
Changing to ASL Mode

1. Place the unit into volume-tone control mode 2.

[For details, see "Selecting the Volume-tone Control Mode" on page 14.]
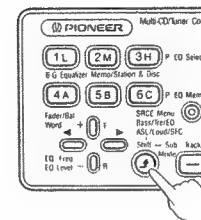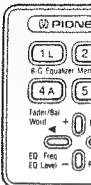

2. Specify the ASL mode.
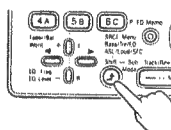

(Press again to release.)

Notes:
- If the volume is at a satisfactory level, the ASL automatically lowers the selected intensity, even at times of high noise.
- Sound distortion may occur when the ASL raises the volume too high. If this occurs, press the volume button to reduce the volume.
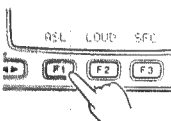
Selecting the

1. Place the

[For details, see

2. Specify th

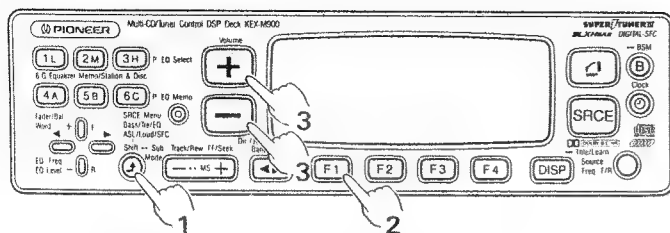Hold down the
at least 2 secor

- Holding down
  on and off. [
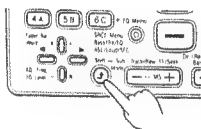
Note:
The next operati
intensity selectior
have elapsed.

16

SL)

el inside the car, which
ions, and automatically
can select one of three
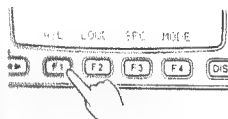to noise inside the car).

e 2.
Mode'' on page 14.]

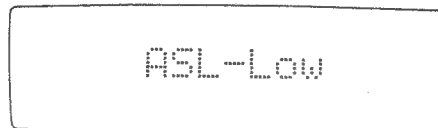## Selecting the Automatic Sound Levelizer (ASL) Intensity

1. Place the unit into volume-tone control mode 2.

[For details, see ''Selecting the Volume-tone Control Mode'' on page 14.]

2. Specify the intensity.


Sensitivity indication

ASL-Low

Hold down the button for
at least 2 seconds.

• Holding down the button for less than 2 seconds switches the ASL mode
on and off. [See page 16.]

Note:
The next operation should be performed within 5 seconds after changing to the
intensity selection mode; if not, the mode is automatically released after 5 seconds
have elapsed.

3. Select the sensitivity.
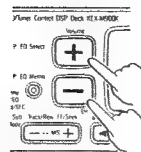
ASL-Low → ASL-Mid → ASL-High

ASL-High → ASL-Mid → ASL-Low

Low volume change   High volume change
ASL-Low → ASL-Mid → ASL-High

17

Adjusting Bass and Treble

Features of Bass and Treble Adjustment
- Changing to the tone adjustment mode allows you to adjust bass and treble of the front and rear speakers either separately or in combination.
- You can set the desired frequency to serve as the basis of bass and treble adjustments can be set.
- The unit can be set to memorize different bass and treble settings.

Selecting the Tone Adjustment Mode
Your unit allows you to select two tone adjustment modes. Select the mode of your choice before adjusting the bass or treble.
[Details on adjusting bass and treble are provided in the sections below.]
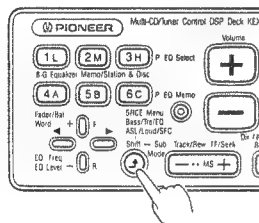
Combined Adjustment Mode
In this mode, the tone of both front and rear speakers is adjusted at the same time.

Separate Adjustment Mode
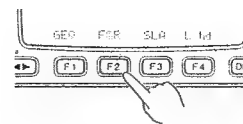In this mode, the tone of the front and rear speakers is adjusted separately.

1. Place the unit into volume-tone control mode 3.
[For details, see "Selecting the Volume-tone Control Mode" on page 14.]

Hold down the button for at least 2 seconds.

2. Specify the tone adjustment mode.

Combined Adjustment Mode
The tone of both the front and rear speakers is adjusted at the same time.

F&R

Separate Adjustment Mode
The tone of the front and rear speakers is adjusted separately.

This func
and trebl
Using th
In this m
time.
[Refer to
explanatio
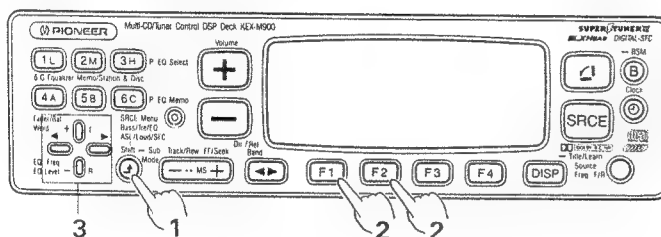

1. Place
[See "Sele

2. Specif
   Bass a

Adjusting Bass and Treble

This function allows you to select the frequencies to serve as the basis for bass and treble adjustments.
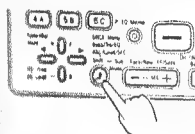
Using the Combined Adjustment Mode

In this mode, the tone of both front and rear speakers is adjusted at the same time.

[Refer to the previous section, "Selecting the Tone Adjustment Mode" for an explanation of the combined adjustment mode.]
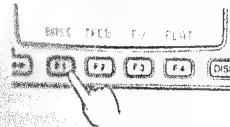

1. Place the unit into volume-tone control mode 1.

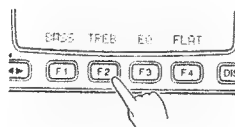[See "Selecting the Volume-tone Control Mode" on page 14.]

2. Specify bass adjustment or treble adjustment.

Bass adjustment   Treble adjustment
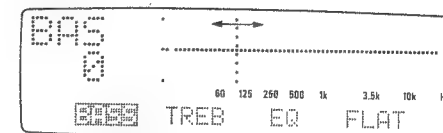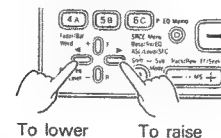

3. Make the desired tone.

The following frequencies can be specified for of bass and treble adjustment:
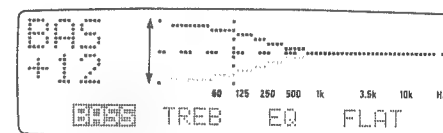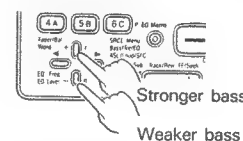Bass: 63 Hz, 100 Hz, 160 Hz, 250 Hz
Treble: 4 kHz, 6.3 kHz, 10 kHz, 16 kHz

Bass Adjustment

①Select the bass frequency to be adjusted.

To lower   To raise

②Set the desired level.

Stronger bass

Weaker bass

Treble Adjustment

①Select the treble frequency to be adjusted.

To lower   To raise

②Specify the desired level.

Stronger treble

Weaker treble

19

ment Mode
the front and rear
ed at the same time.
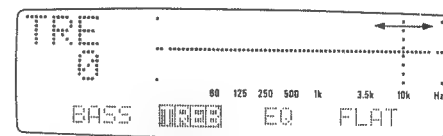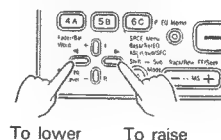
ment Mode
e front and rear
ted separately.
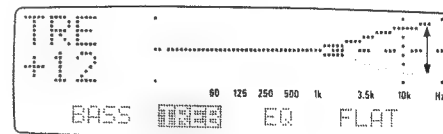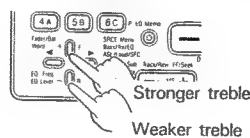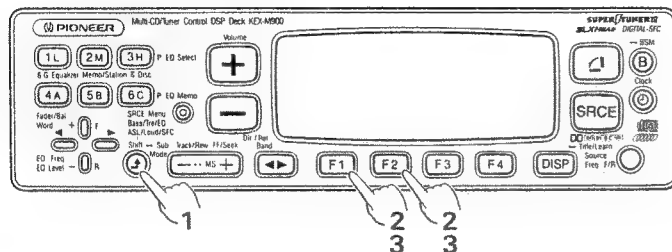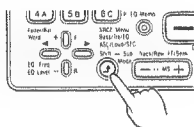
Using the Separate Adjustment Mode

In this mode, the tone of the front and rear speakers is adjusted separately. [See the previous section, "Selecting the Tone Adjustment Mode" for an explanation of the separate adjustment mode.]
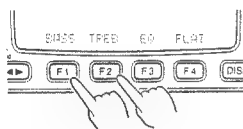
1. Place the unit into volume-tone control mode 1.

[See "Selecting the Volume-tone Control Mode" on page 14]

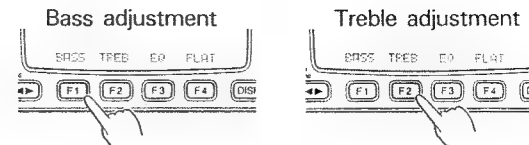### 2. Select the set of speakers whose tone is to be adjusted (front or rear).

Pressing either button two times causes the speaker selection to switch in the following sequence.

┌──► Front speakers ─► Rear speakers ──┐

3. Select bass or treble.

Bass adjustment   Treble adjustment

Note:
Pressing either button twice switches the speaker selection. [See the previous step.]

4. Make the desired adjustment.

[Refer to the procedure 3 on page 19.]
• Repeat steps 2 to 4 to adjust the bass or treble of the other set of speakers.

Switching to the Combined Adjustment Mode After Adjusting the Ton in the Separate Adjustment Mode

Tone adjustments for the front and rear speakers made in the separate adjustmen mode will remain the same even after changing to the combined adjustmen mode. Thereafter, any adjustment of bass or treble in the new mode will chang the respective setting of both rear and front speakers at the same time. Th procedure for adjusting bass and treble is basically the same as that explaine in "Combined Adjustment Mode" on page 19, but with the following differences

Points on the Use of the Combined Adjustment Mode After the Separat Adjustment Mode
• A dotted line (....) for the front speaker setting and a solid line (—) for th rear speaker setting will appear on the display at the same time.
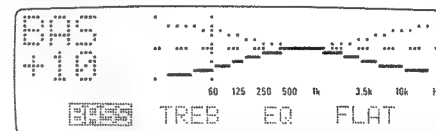
• In the combined adjustment mode, changes made in the bass or treble settr are made for both the front and rear speakers at the same time. If any chan causes a front or rear speaker setting to reach maximum will, furth adjustment will be not be possible.

Selecti
Your unit
equalizer
on equaliz

Features
• Allows
  20 kHz.
• Allows
  separate
• Allows

Features o
• Allows l
  1 kHz, 3
• Allows

1. Place th

[See "Sele

Hold down

2. Select t

Each press o

┌── Para
└── Grap

Equalizer Adjustment

Selecting the Equalizer Mode

Your unit provides the two equalizer modes described below. Select the desired equalizer mode before adjusting the equalizer. [See the next section for details on equalizer adjustment.]
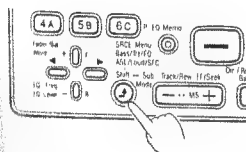
Features of the Parametric Equalizer Mode
- Allows adjustment of any 3 frequencies (bands) in an range from 20 Hz to 20 kHz.
- Allows the equalizer curve for the front and rear speakers to be adjusted separately.
- Allows the memorization of 3 equalizer curves of your choice. [See page 23.]

Features of the Graphic Equalizer Mode
- Allows level adjustments for frequencies of 60 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 3.5 kHz, and 10 kHz.
- Allows the memorization of 6 equalizer curves of your choice. [See page 23.]

1.Place the unit in volume-tone control mode 3.

[See "Selecting the Volume-tone Control Mode" on page 14.]

Hold down the button for at least 2 seconeds.
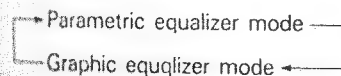
2.Select the equalizer mode.
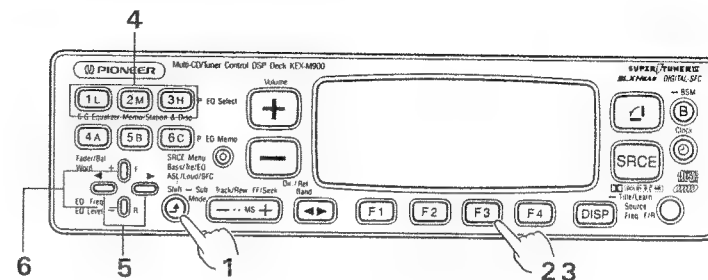
Parametric equalizer mode

Graphic equalizer mode

Each press of the button switches the unit to the other equalizer mode, follows:

Parametric equalizer mode
Graphic equqlizer mode

Using the Parametric Equalizer
Memorizing Equalizer Curves

1.Place the unit into volume-tone control mode 1.

[See "Selecting the Volume-tone Control Mode" on page 14.]

2.Specify the equalizer adjustment mode.

EQ

3.Select the set of speakers (front or rear).

Each press of the button switches the unit to the other speaker set, as follows:

60 125 250 500 1k   60 125 250 500 1k

Front speakers → Rear speakers

4. Select the band to be adjusted.

Select one of the three bands, L, M, or H.

5. Set the desired frequency.
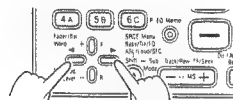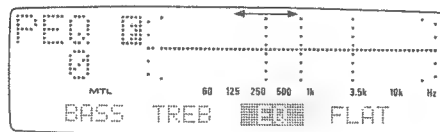
Lower   Higher

6. Set the desired level.
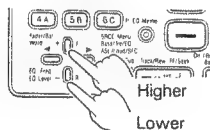
Higher

Lower
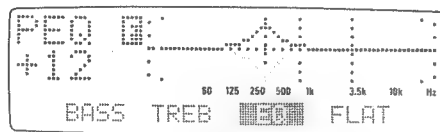
7. Adjust another band.

Repeat steps 4 to 6 for another band.

- Repeating steps 3 to 7 allows you to set the equalizer curve for the front and rear speakers separately.

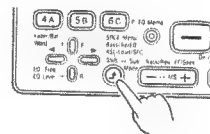## Using the Graphic Equalizer
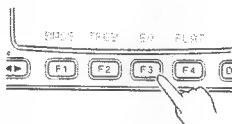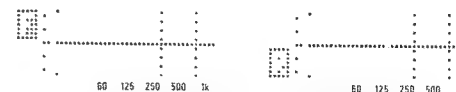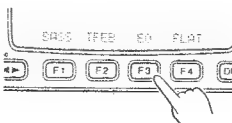### Setting Equalizer Curves
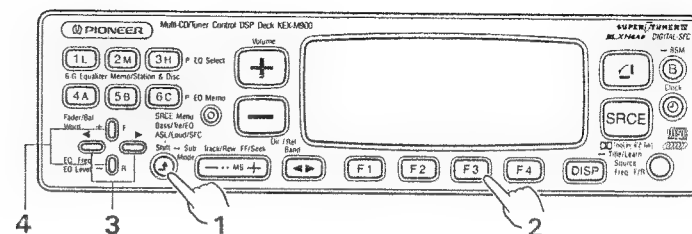
4   3   1   2

1. Place the unit into volume-tone control mode 1.

[See "Selecting the Volume-tone Control Mode" on page 14.]

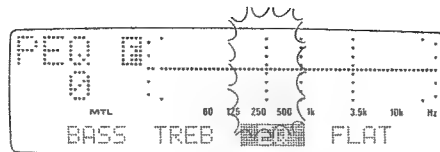## 2. Specify the equalizer adjustment mode.

3. Set the desired frequency.

Lower   Higher

---

4. Set the

5. Set anoth

Repeat steps

22

4. Set the desired level.

Higher

Lower

```
GEQ      : · · · · · · · · · :
+12      :·········◇·········:
         : · · · · · · · · · :
            60 125 250 500 1k  3.5k 10k  Hz
BASS  TREB  ▒▒▒  FLAT
```

5. Set another frequecy.
Repeat steps 3 and 4.

The memory buttons can be used to memorize the bass, treble, and equalizer settings of your choice.
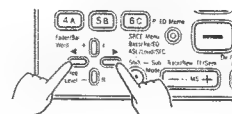
Note:
Memorizing tone settings is possible only in volume-tone control mode 1. Before performing this procedure, make sure that the unit is in volume-tone control mode 1.
[See "Selecting the Volume-tone Control Mode" on page 14.]

3 Memory buttons
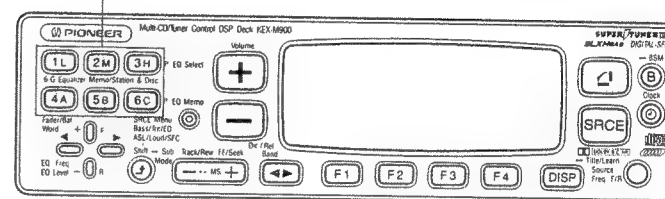
1. **Adjust the bass and treble as desired.**
[See "Adjusting Bass and Treble" on page 18.]

2. **Adjust the equalizer.**
[See "Equalizer Adjustment" on page 21.]

3. **Memorize the setting.**
Hold down the button for at least 2 seconds (until two beeps have sounded).
Example: Memorizing the setting to memory button 4.
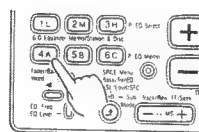
Parametric equalizer mode   Graphic equalizer mode

```
PEQ                          GEQ
M-A                          M-4
```

Hold down the button for at least 2 seconds.
• Holding down the button for less than 2 seconds recalls the previously memorized tone or equalization setting. [See page 24.]

Note:
Three buttons (buttons 4 to 6) can be used to memorize three settings in the parametric equalizer mode, and six buttons (buttons 1 to 6) can be used to memorize 6 settings in the graphic equalizer mode.

23

Che

The following procedure allows you to recall tone and equalizer settings that have been previously memorized to the memory buttons.
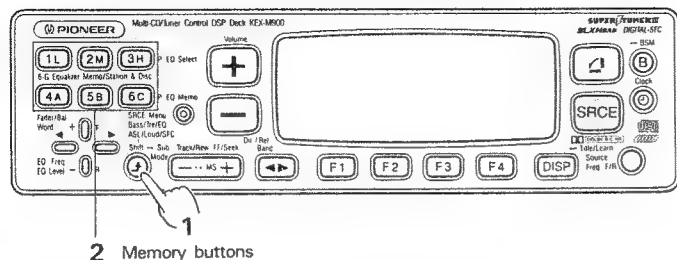
2 Memory buttons

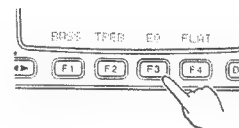## 1. Place the unit in volume-tone control mode 1.

[See "Selecting the Volume-tone Control Mode" on page 14.]
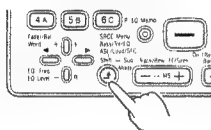
2. Recall the desired tone setting.

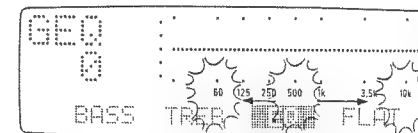**Example:** Calling up the setting memorized to memory button 4.
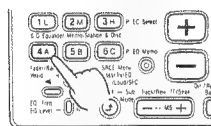
• Holding down the button for more than 2 seconds activates the memorization function. [See page 23.]

The force
or equalize
and previo

1. Place t

[See "Sele
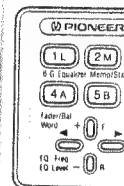
2. Activat
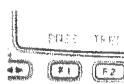
(Press again
• Holding
function.

Note:
Bass, treble,
is activated.
flat function

The Norma
The normal
equalizer se

24

Checking the Results of a Tone Adjustment (Forced Flat Function)

The forced flat function makes it easy to reference the previous bass, treble, or equalizer setting after making a new adjustment. Switching between the new and previous settings allows you to ascertain the results of any adjustment.

1. **Place the unit into volume-tone control mode 1.**

[See "Selecting the Volume-tone Control Mode" on page 14.]
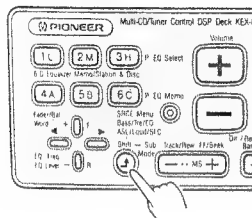
2. **Activate the forced flat function by pressing button F4.**
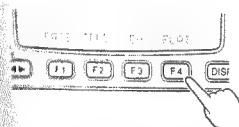
FLAT ——▶ █▓▒░

(Press again to turn off.)
* Holding down the button for more than 2 seconds activates the normal flat function. [See "The Normal Flat Function" in the next section.]

Note:
Bass, treble, and equalizer adjustments are disabled while the forced flat function is activated. If you desire to make any of these adjustments, turn off the forced flat function first.

The Normal Flat Function

The normal flat function allows you to return to a previous bass, treble, or equalizer setting and to change it.

Using Sound Field Control

What is Sound Field Control?

Everyone knows that the sound of a performance is affected by the location: different spaces produce different resonances; ceilings and walls reflect sound in different directions and speeds. Where you sit also has a great effect. This unit supplies 4 different sound fields that vividly reproduce the qualities of spaces such as concert halls and recording studios.

The Sound Fields Supplied with Your Unit

Studio

This sound field recreates the sounds of comparitively small spaces such as recording studios or small-sized hall.

Jazz Club

This sound field produces the pleasurable effects of a jazz club or live house.

Concert Hall

This sound field gives sounds the expansiveness of a concert hall.

Stadium

This sound field takes you into the huge space of a football stadium or baseball field.

Note:

The sound field control function provides optimum results in a system with 2 amplifiers and 4 speakers, but it can also be used in a system with 1 amplifier and two speakers. In the latter case, front-positioned speakers will produce better results than back-positioned speakers.

Before Using the Sound Field Control

Adjusting the Sound Field by Car Configuration

The ideal position in a sound field (at the center between the left and right speakers) unfortunately does not correspond with the position of the driver's seat (which is either on the left-hand or right-hand side of the car). To compensate for this, the main unit allows you to specify the configuration of your car, then changes the sound field to suit it.

1. Place the unit into volume-tone control mode 3.

[See "Selecting the Volume-tone Control Mode" on page 14.]
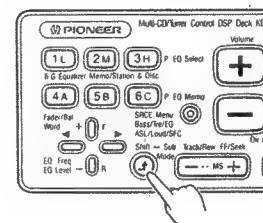
Hold down the button for at least 2 seconds.

2. The sound field changes to suit your car configuration.
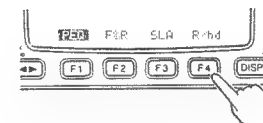
For a left-hand driver's seat

L/hd

For a right-hand driver's seat

R/hd

Note:

Although the sound field is adjusted to suit the car's basic configuration (i. with a left-hand or right-hand driver's seat), differences in car model or spea position may cause better results to be achieved by specifying the oppos configuration. For this reason, listen to both settings and choose the one t gives the most natural sound.

Using the
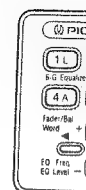
1. Place the u
[See "Selecting
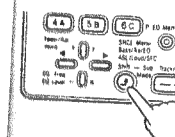
2. Turn the SI

(Press again to
3. Select the s
Each press of the order:

Using the Sound Field Control (SFC)
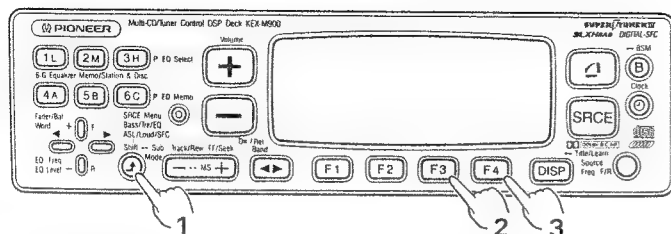
1. Place the unit into volume-tone control mode 2.

[See "Selecting the Volume-tone Control Mode" on page 14.]
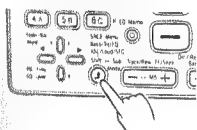
2. Turn the SFC function on.
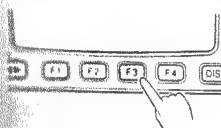
SFC ──▶ ▓▓▓

(Press again to turn off.)

3. Select the sound field program.

Each press of the button changes the unit to the next sound field, in the following order:

```
┌─ Studio ──▶ Jazz Club ─┐
└─ Stadium ◀─ ConcertHall ◀┘
```

4. Adjust the volume of the front and rear speakers until equal.

[See "Adjusting the Fader" on page 12.]

• There are two ways to adjust the fader: while SFC is on and while it is off. If you adjust the fader while SFC is on, then turn off SFC, the fader will change to the previous setting that was made while SFC was off.

27

Common Functions

Selecting the Source -Tape Deck, CD, and Radio

If the main unit is connnected to the separately available multi-play CD player and hide-away tuner, each press of the button shown below changes the source in the following order:


```
  ┌──► Multi-play CD ──────► Tape deck ──┐
  │                                      │
  └──── Power off ◄──────── Radio ◄──────┘
```
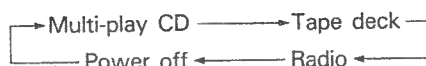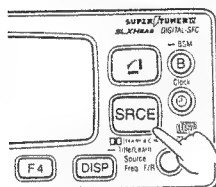
* The source will not change if the main unit is not connected to the other separately available units.
* The main unit will not change to multi-play CD player if a magazine has not been loaded into the multi-play CD player.
* The source will not change to tape deck if a cassette has not been loaded in the deck.
* The source selection operation will differ slightly if the unit is connected to the separately available single-disc CD player. [See "Operations with a Single-disc CD Player" on page 30.]

Using the Clock Display

Turning on the Clock Display


```
   12:00 AM
```
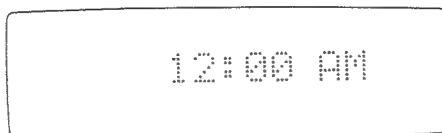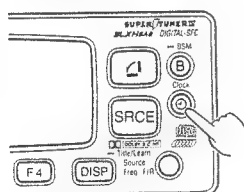
(Press again to turn off.)
* When the clock display is on, pressing any button will turn the clock display off. The clock display will turn on again 25 seconds after the button operation.

Adjusting the Clock

Adjusting the Hours

While holding down button ①, press button ②.
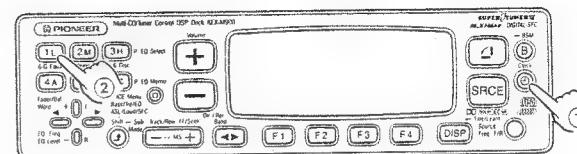
Each press of button advances the hour setting by one hour, and holding it dow advances it at high speed.

Adjusting the Minutes

While holding down button ①, press button ②.
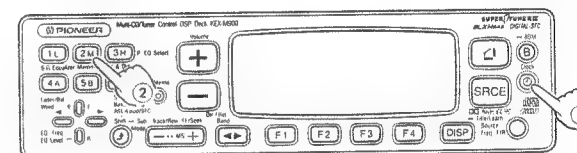
Each press of the button advances the minutes setting by one minute, and hold it down advances the setting at high speed.
* After completing the minute adjustment, releasing button ① will start the cl operation from zero second (seconds are not displayed). For greater accura synchronize the release of the button with a time report. If only the hour l been adjusted, the clock will not start from zero second when the button released.

Using th

You can us from the ma used button

1. Specify
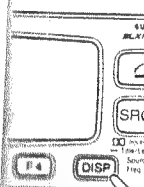
Hold down t at least 2 se

* Holding do display. [S

Note:
* The next o the learning seconds ha

Using the Learning Function on the Remote Controller

You can use the learn button on the controller to record an operation button from the main unit, thus allowing you the convenience of activating a frequently used button with the remote controller.
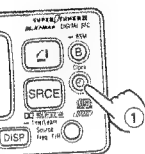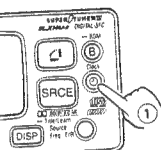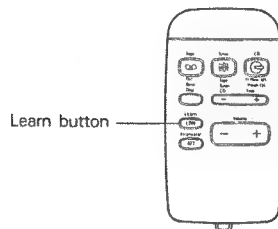
Learn button

1. Specify the learning mode.
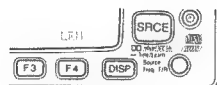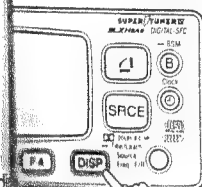
Hold down the button for at least 2 seconds.

• Holding down the button for less than 2 seconds results in a change in the display. [See page 31.]

Note:

• The next operation should be performed within 5 seconds after specifying the learning mode; otherwise, the mode is automatically turned off after 5 seconds have elapsed.

2. Specify the memory mode.
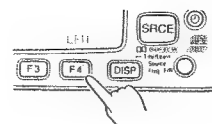
✳✳✳Learn✳✳✳

3. Memorize the desired button.

Press the button on the main unit that you want memorized on the remote controller.

Example: Memorizing the clock display button
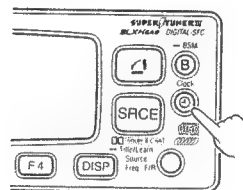
You can now use the learn button on the remote controller to perform the same operation as the button on the main unit.

(partial text from previous page visible at left margin)

②.

g by one hour, and holding it dow

②.

s setting by one minute, and hold

d.

eleasing button ① will start the cl

not displayed). For greater accura

th a time report. If only the hour

om zero second when the butto

29

Operations with a Single-Disc CD Player

When the main unit is connected to the separately available single-disc CD player, turning off the main unit powers on the CD player, allowing you to play single CDs.

Disc Play Indication

The following indication appears on the main unit's display when a single CD is being played.

```
Auxiliary
    Input Position
```

Using the Remote Controller

The remote controller can be used to operate a Pioneer CDX-4 or any newer Pioneer single-disc CD player.

Starting Disc Play

You can begin playing a CD immediately after loading it into the single-disc CD player.

Each press of the button switches the source between the multi-play CD and single-disc CD players, as follows:

→ Multi-play CD ──→ Single-disc CD ──┐
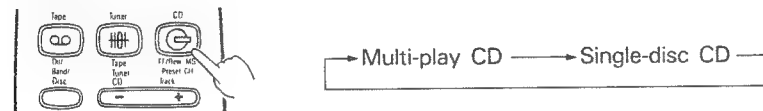
Selecting a Track on the Single-disc CD Player

To lower the   To raise the
track number   track number

30
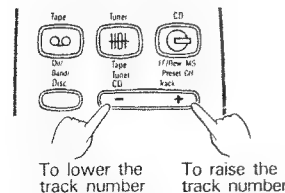
- The main unit cannot be turned off while the single-disc CD player is in operation. To turn off the main unit, first stop the single-disc CD player. [For details, refer to the owner's manual of the single-disc CD player.]

Note:
It takes several seconds to switch from multi-play CD player to single-disc CD player when the digital output of the separately available multi-play CD player is connected to the digital input of the main unit by the separately available Digital Fiber Optic Cable.

the single-disc CD player is i
op the single-disc CD player.
the single-disc CD player.]

lay CD player to single-disc C
y available multi-play CD playe
by the separately available Digit

Changing the Display
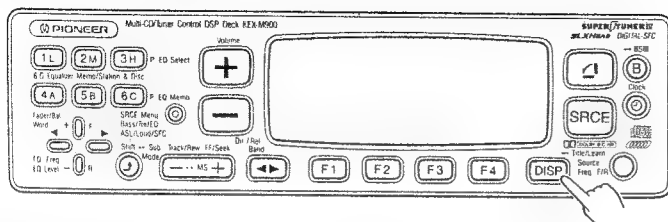
Each press of the button changes the display as shown below.
• If the button is held down for more than 2 seconds, the unit changes to the learning mode.
[See "Using the Learning Function on the Remote Controller" on page 29.]

```
  ┌──► Front Speaker Combined ──────► Rear Speaker Combined ──┐
  │    Frequency Curve                Frequency Curve          │
  └──────────────── End (Displays previous mode) ◄────────────┘
```
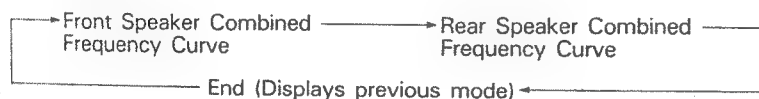
Front Speaker Combined Frequency Curve
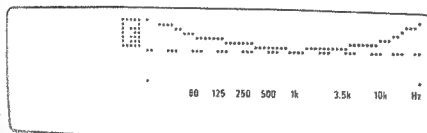
Rear Speaker Combined Frequency Curve
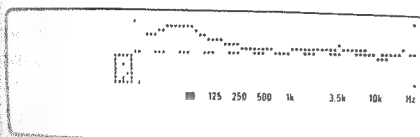
• **What is the Combined Frequency Curve?**
The combined frequency curve represents the overall sound quality by combining bass, treble, and equalizer settings into a single characteristic curve.
Example:
Bass and treble settings
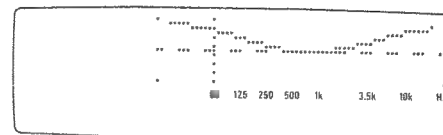
Equalizer setting
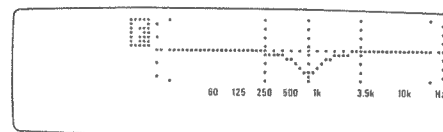
Combined frequency curve
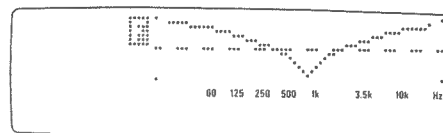
• When the combined frequency curve display is on, pressing another control button turns the display off. Five seconds after the button operation, the combined frequency curve display will turn on again.
• When the clock display is on, switching the display turns off the clock display.

31

Using the Self-Demonstration Function

What is the Self-demonstration function?

This function provides an introduction to each audio control (tone, equalizer, etc.) by sequentially performing and displaying each setting (through a built-in automatic adjustment function) for each source (multi-play CD player, tape deck, tuner). When turned on, the self-demonstration function automatically selects, activates, and begins playing the various sources in the following order:

① Multi-play CD player ② Tape deck ③ Tuner

- Unprepared Sources Are Skipped.
- Any source that is not ready for play is skipped. In other words, the multi-play CD player is skipped if a magazine is not loaded, and the tape deck is skipped if no cassette is loaded.

Sequential Order of the Self-Demonstration Function

- Start (Volume)
  [See page 12.]

- Fader Control/ Balance
  [See page 12.]

- Bass/Treble [See page 18.]
  - If the unit is in separate adjustment mode, the tone for both the front and rear speakers is adjusted.

- Sound field control
  [See page 26.]

- Parametric equalizer/Graphic equalizer [See page 21.]
  - If the unit is in the graphic equalizer mode, the graphic equalizer setting is performed first, followed by the parametric equalizer setting.

Performing the Self-Demonstration

1. Turn off the main unit.

[See "Selecting the Source" on page 28.]

2. Turn on the self-demonstration function.

Press both keys at the same time.
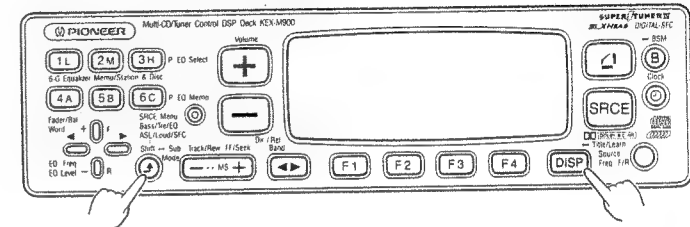
(Pressing any button turns off the self-demonstration function.)
- Pressing a control button during the self-demonstration activates the func of the respective button and ends the self-demonstration. The bass and tr settings that were effective during the self-demonstration will stay the sa when the self-demonstration ends.

Notes:
- The remote controller cannot be used while the self-demonstration is b performed.
- When the ignition is off, the self-demonstration indications will not ap on the display, so make sure the ignition is at ON or ACC before starting self-demonstration.
- The self-demonstration takes a long time and may exhaust the batte performed with the engine off. To avoid this, do not perform the demonstration for long periods while the engine is off.
- Since all audio settings (bass, treble, equalizer, etc.) are changed during self-demonstration, settings which you want to keep should be memo before performing the self-demonstration. [See page 23.]

:assette
Do not pla
Store tape
Rewind ca
The Front
The casse
Do not pla
it is open

recaution
A dirty pla
high freque
optimum so
"Head Clea
When a tap
activate the
directions.
before atter
Search" on

Using the Tape Deck

Cassette Tape Handling
- Do not place tapes near magnets.
- Store tapes in a place not subject to direct sunlight.
- Rewind cassettes and store them in their cases when not in use.

The Front Panel of the Tape Deck
- The cassette slot appears when you open the front panel.
- Do not place heavy objects or downward pressure on the front panel when it is open since this may cause a malfunction in the main unit.

ation function.)
stration activates the funct
nstration. The bass and tre
nonstration will stay the sa

ne self-demonstration is be

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ON or ACC before starting

d may exhaust the batte
his, do not perform the
gine is off.
r, etc.) are changed during
to keep should be memo
ee page 23.]
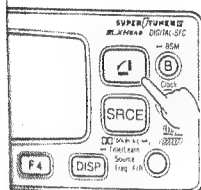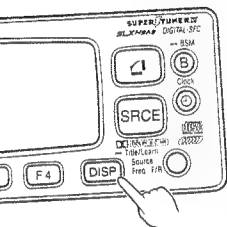
Precautions on Cassette Play
- A dirty playback head is a cause of a variety of problems, such as loss of high frequencies, poor sound quality, and reduced sound output. To maintain optimum sound quality, the playback head should be cleaned periodically. [See "Head Cleaning" on page 37.]
- When a tape is unevenly wound, the higher force required to move it may activate the tape end detection and cause tape play to automatically switch directions. If this occurs, use fast forward or rewind to wind the tape evenly before attempting playback. [See "Using Fast Forward, Rewind, and Music Search" on page 35.]

Listening to a Cassette
Before Loading a Cassette
Precautions
- A loose or warped label on a cassette may interfere with the eject mechanism of the deck, or cause the cassette to become jammed in the deck. Labels in such condition should be removed completely before loading the cassette.
- Do not use C-120 (120-minute) cassettes. The tape is very thin and can stretch and cause poor operation.

1. Open the front panel.
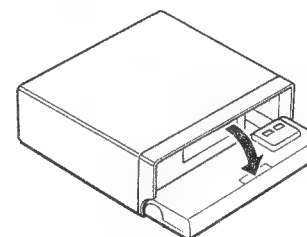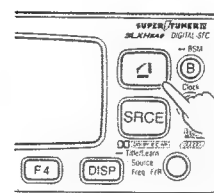
2. Insert a cassette.
The cassette is automatically loaded and play begins.

```
TAPE  ▶ ▶ ▶ ▶
NOR   Play
      MTL
      NR  B.SKP  R.INT  RPT.P
```
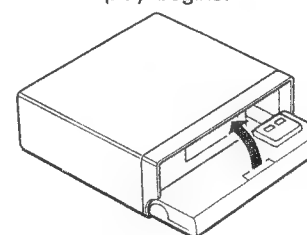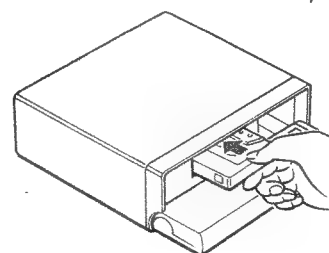
Note:
A defect in the cassette, such as broken or tangled tape, may cause the unit to turn off, or cycle on and off without playing. If this occurs, eject the cassette and check it for defects. [See "Ejecting a Cassette" on page 34.]

33

Loading a Cassette

Switch the source to tape deck. [See page 28.]
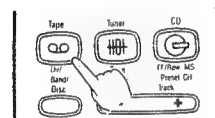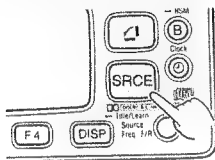
(Press again to turn off.)
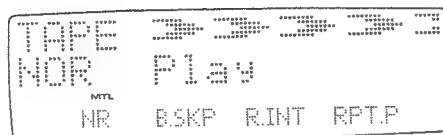
The Metal Tape Display (Auto Tape Selector)

The main unit automatically detects the tape type when a cassette is loaded, then sets the play equalization to the proper level (70μs/120μs). When metal tape or CrO₂ tape is loaded, MTL appears on the display. No indication appears for normal tape.
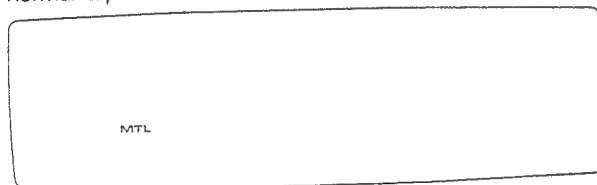
Changing Tape Direction
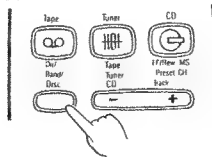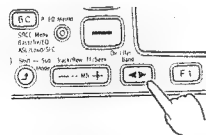
- Performing this procedure during fast forward, rewind, music search, or music repeat, ends the respective function, but does not change the tape direction.

Stopping Play

Switch the unit to another source or turn off the power. [See page 28.]
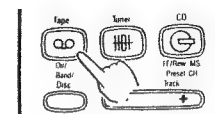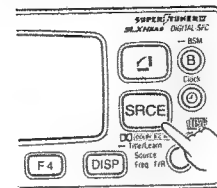
(Press again to restart play.)

Ejecting a Cassette

1.
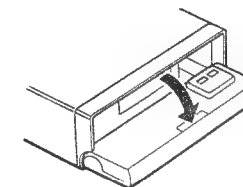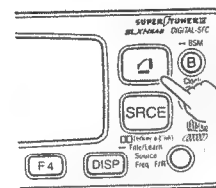
Open the front panel.

2.
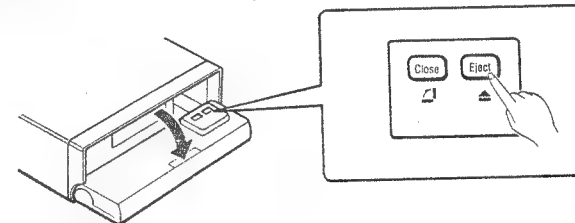
The cassette ejects.
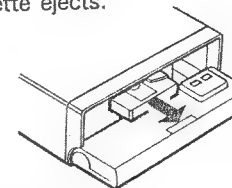
If the cassette is inserted again, it automatically loads, the front panel c and play starts.

power. [See page 28.]

play.)
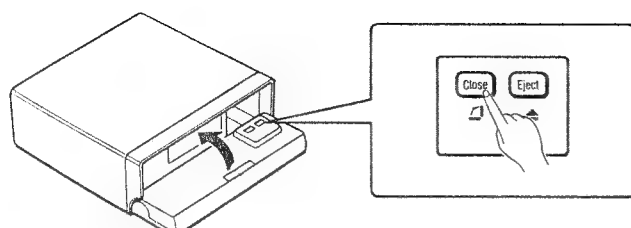
emove the cassette and close the front panel.

Even with the ignition off, a cassette can still be ejected if you press the eject button within 30 seconds after turning off the ignition.

panel.

tically loads, the front panel

Using Fast Forward, Rewind, and Music Search

Each press of the respective side of the button shifts the function as follows:

Pressing +: fast forward —→ forward music search —→ end function

Pressing −: rewind —→ reverse music search —→ end function

Display Indication for Each Function

Fast forward

NOR   FF

Forward music search

NOR   F-MS

Rewind

NOR   REW

Reverse music search

NOR   R-MS

- Music search may not function properly for the following types of recordings. This is due to the recording and is not a malfunction of the unit.
  —Recordings with a blank of less than 4 seconds between selections.
  —Recorded dialog with continuous pauses of 4 seconds or more.
  —Low-volume passages of 4 seconds or more.
- The following buttons may also be pressed to end fast forward, rewind, and music search:

35
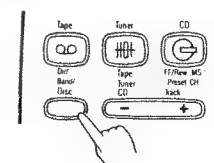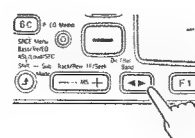
Using Radio Intercept

The radio intercept function allows you to listen to the radio while fast forwarding or rewinding a cassette.

Note:
Radio intercept does not function when the unit is in a volume-tone control mode. Make sure to turn off the volume-tone control mode before using the function. [See "Selecting the Volume-tone Control Mode" on page 14.]

1. Place the unit into radio intercept mode.

R.INT ⟶ (R.INT display)
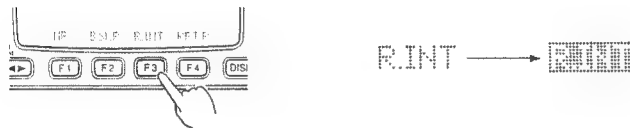
(Press again to turn off.)

2. Start fast forward or rewind.

[See "Using Fast Forward, Rewind, and Music Search" on page 35.]

```
TUNE
FM-1 CH-3 107.5
  MTL
 PSCN  B.SKP  R.INT  MONO
```

- Radio intercept changes the front panel control buttons to tuner control as shown below. [See "Using the Tuner" on page 46.]
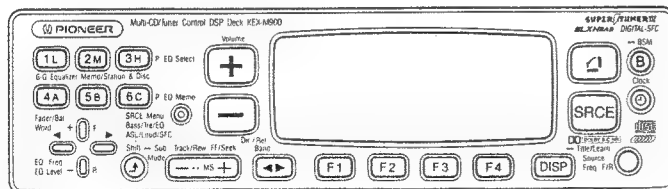
Note:
Radio intercept does not function when music search is in operation.

The Dolby B and Dolby C NR Systems

The Dolby B and Dolby C NR systems both minimize the amount of noise produced during cassette playback. Cassettes recorded with the Dolby B system or the Dolby C NR system should be played on the deck with the respective Dolby system turned on.

Note:
The Dolby B and Dolby C NR systems cannot be switched when the unit is in a volume-tone control mode. Make sure the mode is off before attempting to switch the Dolby system. [See "Selecting the Volume-tone Control Mode" on page 14.]

Each press of the button switches the Dolby system as follows:
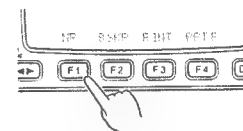
Dolby NR off   Dolby B NR on   Dolby C NR on

⟶ NR ⟶ (NR B) ⟶ (NR C) ⟶
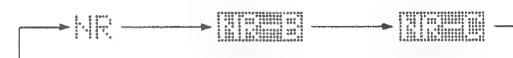
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY" and the double-D symbol ⊓⊔ are trademarks of Dolby Laboratories Licensing Corporation.

s

nize the amount of nois
d with the Dolby B syste
 deck with the respectiv

witched when the unit is
 is off before attempting t
me-tone Control Mode" o

em as follows:

ense from Dolby Laborato

demarks of Dolby Laborato

Using Music Repeat

The music repeat function allows you to listen to a selection as many times as you wish.

Note:
Music repeat does not function when the unit is in a volume-tone control mode. Make sure the mode is off before attempting to use the function. [See "Selecting the Volume-tone Control Mode" on page 14.]

Activate music repeat while the desired selection is playing.
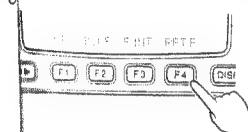
RPT.P ⟶

(Press again to turn off.)
- Music repeat may not function properly for the following types of recordings. This is due to the recording and is not a malfunction of the unit.
  - Recordings with a blank of less than 4 seconds between selections.
  - Recorded dialog with continuous pauses of 4 seconds or more.
  - Low-volume passages of 4 seconds or more.

Using Blank Skip

You can use the blank skip function to record a blank of 15 seconds or more to ensure the efficient operation of the music search function.

Note:
Blank skip does not function when the unit is in a volume-tone control mode. Make sure the mode is off before attempting to use the function. [See "Selecting the Volume-tone Control Mode" on page 14.]
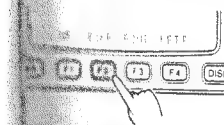
B.SKP ⟶

(Press again to turn off.)

Head Cleaning

The playback head performs an important role in the reproduction of recordings. If the head should become dirty, tone quality suffers and skipping will occur. Therefore, the head should be cleaned periodically (one or twice a month). If a cotton swab is used, dip the swab into absolute alcohol or head cleaning fluid and use it to scrub the slit in the tape head.

Head Position

The head is located on the right side of the tape slot, approximately halfway between the front of the unit and the back.

Pinch roller Head Capstan Slit
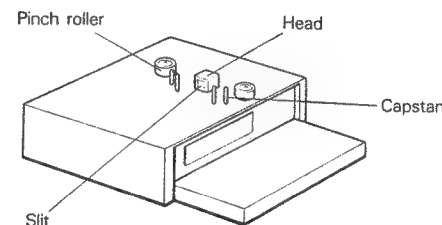
Note:
- Don't use metal or a magnet on the head. Never use tweezers or pliers wrapped with cotton or gauze. This can scratch the head.
- When using a cleaning tape, play it once on one side for normal cleaning. Too much use of the cleaning tape will increase head wear. Be sure to read the cleaning tape instructions before use.

Using the Multi-Play CD Player

The Compact Disc Playing Environment
- Driving over bumpy surfaces or cracks in the road may cause skipping.
- While the vehicle interior is very cold, turning on the car heater, and then the multi-play CD player immediately after, may cause frost to form on the disc or the player's internal optics (prism and lenses), thus resulting in abnormal sound reproduction. If the disc is frosted, wipe it with a soft cloth. If the internal optics are frosted, wait about a hour until the unit returns to normal condition.

Using the Multi-play CD Function
- Use of the multi-play CD function requires connection with the separately available multi-play CD player.
- See the owner's manual of the multi-play CD player for details on the loading and removal of magazines.

Switch the source to CD [See page 28.]

Lighted indicator shows the disk position within the magazine

Digital Input
Disc number
Track number
Elapsed playing time

(Press again to turn off.)
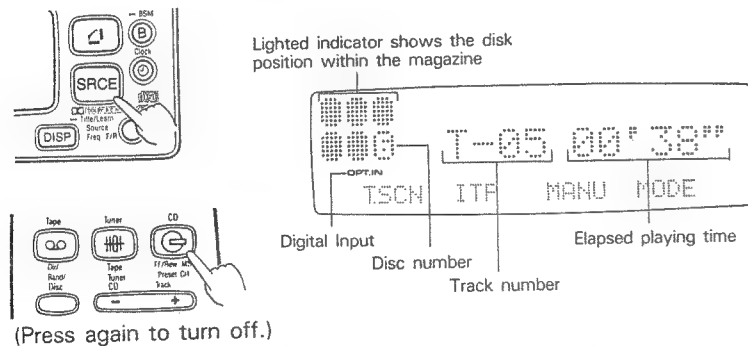
Notes:
- "OPT. IN" appears on the display when the digital output terminal of the magazine-type multi-play CD player is connected to the digital input terminal of the main unit. (This connection requires the separately sold Digital Fiber Optic Cable.)
- The magazine-type multi-play CD player outputs a digital signal after it has detected the connection between it and the main unit by the separately sold Digital Fiber Optic Cable. Since this detection occurs when the ignition is switched from off to ACC, the Digital Fiber Optic Cable should be installed while the ignition is off. (If it has been installed while the ignition was at ACC turn the ignition off, then to ACC again before attempting to operate the C player.
- It takes about 20 to 70 seconds for play to begin after the magazine is insert into the multi-play CD player. This is not a malfunction. The CD player us this time to confirm the presence of discs in the magazine and to read t table of contents (TOC) of each disc (i.e., the number of tracks on the d and the total playing time).

- An error indication appears on the display and operation of the system disabled if the magazine in the multi-play CD player is empty, or when discs are loaded in the magazine trays upside down (with the label facing If this occurs, remove the magazine and check the discs. (See the own manual of the multi-play CD player.)

- Removing the magazine from the multi-play CD player during play will ca the main unit to turn off.

To preven when the source w when the

Using Dis
Main Unit
Push the but
Disc number

The unit w
the magazi
Notes:
Disc numbe
mode. Mak
the Volume
It may take
disc selecti

38

d while the ignition was at ACC
re attempting to operate the C

egin after the magazine is inserte
malfunction. The CD player use
n the magazine and to read th
he number of tracks on the dis

and operation of the system
CD player is empty, or when th
e down (with the label facing up
neck the discs. (See the owner

y CD player during play will cau

To prevent malfunction, the CDX-M100 automatically stops compact disc play when the player's internal temperature rises. When this occurs, listen to another source while waiting for the temperature to lower. Restart compact disc play when the CD player cools down.

$$\ast\ast\ast\ast Heat\ast\ast\ast\ast$$
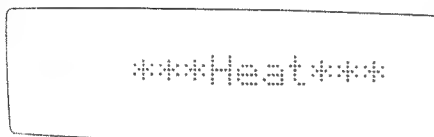
Using Disc Number Search to Select a Disc

Main Unit Operation
Push the button of the desired disc number.
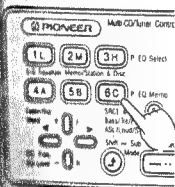
Remote Control Operation
Each push of the button advances the disc number by one.

Disk 1 → 2 → 3 → 4 → 5 → 6
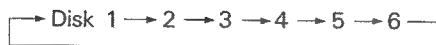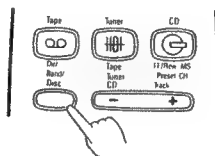
• The unit will not change to a specified disc number if the respective tray in the magazine is empty.

Notes:
• Disc number search does not function when the unit is in a volume-tone control mode. Make sure the mode is off before using this function. (See "Selecting the Volume-tone Control Mode" on page 14.]
• It may take some time before disc play starts after pressing the button if the disc selection requires disc changing in the multi-play CD player.

Convenient Functions for Disc Playback
Using Track Number Search

Note:
Track number search does not function in a volume-tone control mode. Be sure the mode is off before using this function. [See "Selecting the Volume-tone Control Mode" on page 14.]

1.Make sure that the track number search mode is on.
"MANU" is not highlighted.

Track number search mode indication

MANU

• A highlighted indication specifies the fast forward and reverse mode. Turn this mode off before using track number search. [See "Using Fast Forward and Reverse" on page 40.]

2.Specify the desired track number.
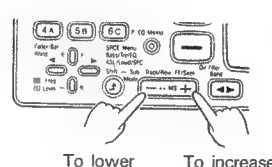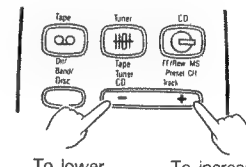
To lower   To increase   To lower   To increase

(Hold down the button to change at high speed.)
• When using the remote controller, track number search may be performed in fast forward and reverse mode also.

Using Fast Forward and Reverse

Note:
Fast forward and reverse do not function in a volume-tone control mode. Make sure this mode is off before attempting to use either function.
[See "Selecting the Volume-tone Control Mode" on page 14.]

1. Place the unit in fast forward and reverse mode.
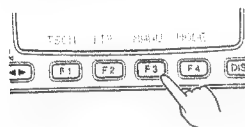
Fast forward/Reverse mode
"MANU" is highlighted.

MANU ⟶ [MANU]

(Press again to turn off.)

2. Start fast forward or reverse.
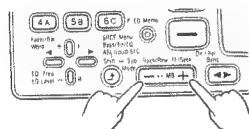
Reverse   Fast forward

- Playback can be heard while fast forwarding or reversing the disc.

Using Highlight Scan Mode

Highlight scan allows you to scan the contents of a disc by playing back ab⟨ne tra⟩
ten seconds of each track in sequential order.
Highlight scan does not function in a volume-tone control mode. Make sure t⟨
mode is off before attempting to use highlight scan.
[See "Selecting the Volume-tone Control Mode" on page 14.]

1. The highlight scan mode is activated.

All tracks on the disc are played for about 10 seconds each, starting from
point about minute after the beginning.
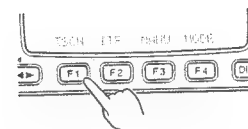
TSCN ⟶ [TSCN]

- By holding the button down for at least 2 seconds, you can change the p⟨
where playback begins in each track. [See next section.]

Notes:
- Although the starting point for playback comes factory set at 1 minute ⟨
the beginning of each track, you can change this to any starting point of ⟨old do⟩
choice. [See next section.]
- If the total playing time of a track is less than the specified starting point ⟨fter cha⟩
if the starting point is set at 1 minute for a track with a playing time ⟨o⟩ ⟨e new⟩
than 1 minute), the starting point changes to about 10 seconds after the ⟨Pressi⟩
of the track. ⟨mode.⟩
- If the specified starting time is less than 10 seconds before the end ⟨p⟩ ⟨otes:⟩
track (e.g., if the starting point is set at 1 minute for a track with a ⟨pl⟩ ⟨The st⟩
time of 1 minute 1 second), playback will be as long as the remaining ⟨is disr⟩
of the track. ⟨Since⟩
- If the main unit is used in conjunction with older types of multi-play CD ⟨p⟩ ⟨a start⟩
(the CDX-M70 or CDX-M100), the starting point for highlight scan is ⟨long st⟩
the start of each track, and cannot be changed. ⟨time.⟩

2.Turn off highlight scan when the desired track begins playing.

disc by playing back abou| The track will continue to play.

ontrol mode. Make sure th

an.

on page 14.]
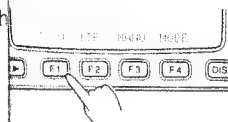
conds each, starting from

* Highlight scan turns off after scanning through all the tracks and returning to the one in which it was first activated.

Changing the Starting Point for Highlight Scan

3.Set the starting point.

Start normal disc play, then hold down the button for at least 2 seconds at the point where you want highlight scan playback to begin (the unit will beep twice).

ds, you can change the po
t section.]
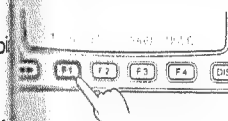
Hold down for at least 2 seconds.

factory set at 1 minute af
s to any starting point of yo

specified starting point (e.
k with a playing time of le
ut 10 seconds after the st

After changing the starting point, the unit changes to highlight scan mode with new starting point setting.

* Pressing the button for less than 2 seconds changes the unit to highlight scan mode. [See previous section.]

conds before the end pf t
ute for a track with a play
s long as the remaining ti

Notes:

* The starting point is set in units of 10 seconds. Any fraction of 10 seconds is disregarded.

types of multi-play CD play
int for highlight scan is se
ed.

* Since the starting point is determined by the elapsed time after start of play, a starting point that exceeds a track's playing time cannot be set. To set a long starting point, perform the procedure using a track with a long playing time.

Using Music Repeat and Random Play Modes

Note:

Music repeat and random play do not function in a volume-tone control mode. Make sure the mode is off before using either function. [See "Selecting the Volume-Tone Control Mode" on page 14.]
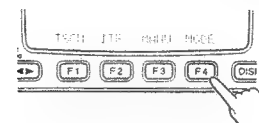
Pressing the button switches the modes as follows:

Music repeat mode → Random play mode → End
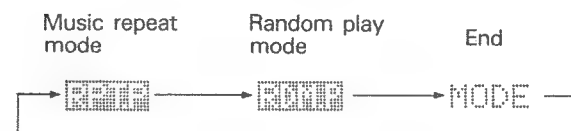
Music Repeat

Music repeat allows you to listen to the same track as many times as you want.

Ramdom play

In the random play mode, the built-in microcomputer selects and plays tracks from the loaded CD (s) in random order.

* Since the order of track selection in random play depends on chance, the same track may be played two times in a row.
* Random play selects from all the tracks on all of the discs loaded in the magazine. If the main unit is used in conjunction with an older magazine-type car CD player (CDX-M100), tracks are randomly selected from the currently playing disc only.

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Using the Disc Title Function

This function allows you record a title for each disc loaded in the multi-play CD player.

Precautions

- A maximum of 72 disc titles can be memorized.
- When more than 72 titles are entered, the oldest titles are erased in sequence and are replaced by the new titles.
- When a disc for which a title has been recorded is loaded, its title appears on the display.
- Titles cannot be input while the multi-play CD player is reading the table of contents (TOC) of the discs in the magazine. Wait until all TOCs have been read before attempting title input. [See "Using the Multi-play CD Player" on page 38.]

Entering a Disc Title

Note:

The procedure for entering a title must be performed within 5 seconds after changing to disc title input mode. If not, the mode is automatically cancelled and the procedure must be repeated from the start.
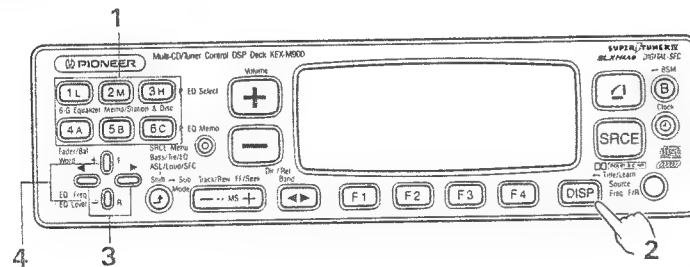
1. Select the desired disc.

[See "Using Disc Number Search to Select a Disc" on page 39.]
- When a disc with a previously recorded disc title is played, the title of the disc will appear on the display.

2. Specify the title input mode.
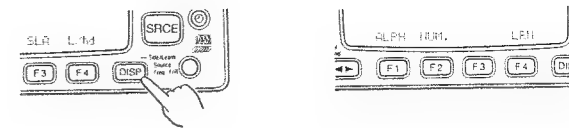
Hold down for at least 2 seconds.
- Holding the button down for less than 2 seconds changes the display. [See page 31.]

3. Select the input position.

Up to ten alphanumeric characters can be input. The input position is highlighted.
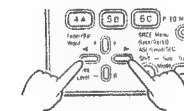
To the left   To the right
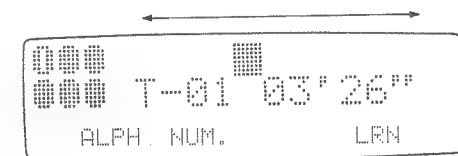
4. Select the alphanumeric character to be input.

The following characters can be entered:

Letters: A to Z
Numbers: 0 to 9
Symbols: ! '' # $ % & ' ( ) * + , − / : ; < = > ? @ [\ ] ^ −
- To change an existing character to a blank, enter the space character located between ! and −.
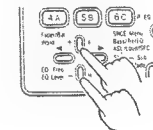
he following procedure allows you to conveniently call up a disc title
ith a single letter or number.

Letter   Number

conds changes the display. [S
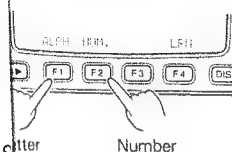
To correct or change any character that has been input, repeat step 3 to specify
the character, and step 4 to write the new character over the old one.

. The input position is highlight To erase a character or leave a blank space, enter the space character located
between ! and —.

Input the remaining characters.

peat steps 3 and 4 until all the desired characters have been input. After input
completed, wait 5 seconds and the title will be recorded.

be input.

; < = > ? @ [\ ] ^ —
, enter the space character loc
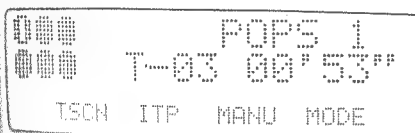
Repeat steps 1 to 5 to input a title for other discs.

Using Program Play (Instant Track Programming (ITP))

With program play, you can program the playback sequence of desired tracks
from all the tracks contained on the compact discs loaded in the magazine.

Before Using Program Play

- Program play will not function for old types of multi-play CD players [CDX-M70 or CDX-M100].
- Up to 32 tracks (steps) can be programmed per magazine.
- Since programs are recorded for individual magazines, when a preprogrammed magazine is loaded, its program is retrieved from memory and play is performed according to the programmed sequence.
- Magazine identification is performed according to the compact disc in tray 1 of a magazine. Tray 1 should therefore always be loaded. Although a program can be created even when tray 1 is empty, the program is erased when the magazine is removed.
- Up to 16 magazines can be programmed. If you program more than 16, the oldest programs will be deleted in sequence and replaced with with the new ones.

Programming Procedure

Note:

Program play cannot be performed in a volume-tone control mode. Make sure
the mode is off before using this function. [See "Selecting the Volume-tone
Control Mode" on page 14.]

1. Play the track to be programmed.

[See "Using Disc Number Search to Select a Disc" on page 39 and "Using Track
Number Search" on page 39.]

2. Record the first step (track).

The currently playing track is recorded as as selection 1 in the program.
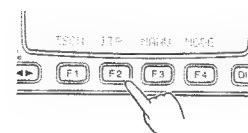
Programming indication shown for
about 3 seconds.

- Take care not to press this button by accident since it will cause the program to be recorded.

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- Holding down the button for more than 2 seconds causes the program to play. [See the next section].

3.Record the remainder of the desired tracks.

Repeat steps 1 and 2.
- If the memory contains a number of tracks, the new selection is added to the next step.
- Programming is possible even when the multi-play CD player is in highlight scan, music repeat, or random play mode.
- Up to 32 steps can be recorded. If recording of a 33rd step is attempted, "Full" appears on the display for about 3 seconds to indicate further recording is not possible.

```
                    Full
```
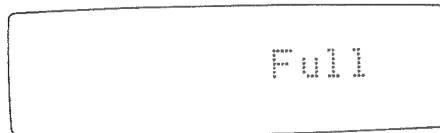
Playing Back a Program

Note:
Program play cannot be performed in a volume-tone control mode. Be sure to turn off the mode before attempting program play. [See page 14.]

1.Activate program play.
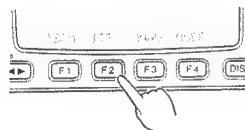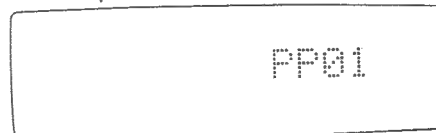
ITP ⟶ ▓▓▓▓

Current step

```
                    PP01
```

Hold down for at least 2 seconds.
(Press again to cancel.)

- Holding down the button for less than 2 seconds activates the programming mode. [See previous section.]
- When program play is activated, all tracks are played in the programmed sequence. When the last step finishes, the program returns to the first step and begins playing again.
- When program play is attempted for a magazine with no recorded program, "Empty" appears on the display for about 3 seconds.

```
                    Empty
```

2.Searching for a step number (step number search).
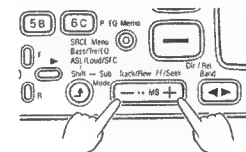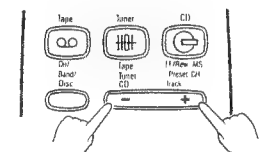
To decrease   To advance   To decrease   To advance
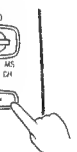
seconds activates the programmi

ks are played in the programm
e program returns to the first st

agazine with no recorded progra
ut 3 seconds.

number search).

To decrease   To advance

## rasing a Single Selection from a Program

te:

sing a single selection from a program is not possible in a volume-tone control
de. Make sure the mode is off before attempting this function. [See "Selecting
e Volume-tone Control Mode" on page 14.]

Play the program.
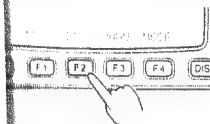
ee previous section.]
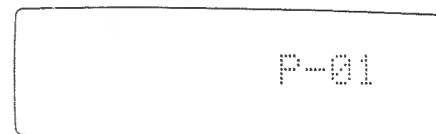

ld down the button for at least 2 seconds.

Find the track to be erased and play it.

ee previous section.]
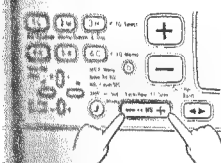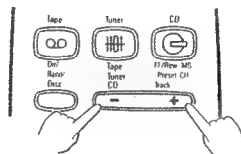
Erase the track.

ld down the button for about 2 seconds (until a beep sounds).

down for more than 2 seconds.

fter the selection is erased, all following selections move up one place in
e program sequence.

Erasing an Entire Program

During normal play, press the button for at least 2 seconds (until a beep sounds).
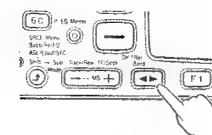
Hold down for at least 2
seconds.
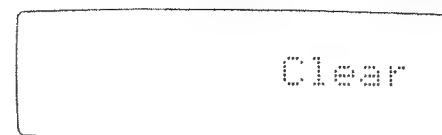
Indication shown for about 3
seconds.

The program recorded for the currently playing magazine is erased.

Note:

Erasing a program is not possible during the highlight scan, music repeat, or
random play modes. Turn these modes off and begin normal CD play before
erasing a program. [See page 40 and 41.]

45

Using the Tuner

- Tuning in radio broadcasts requires connection to the separately available FM/AM hide-away tuner.

Before Listening to the Radio

Changing the Tuning Step

The main unit allows you to specify a tuning step of either 9 kHz or 10 kHz for the AM band. (The initial setting is 9 kHz.)
When used in North America, Central America, or South America, the tuning step should be changed to 10 kHz.

Changing the Tuning Step
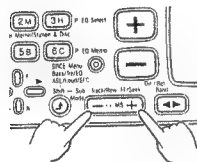
While pressing either button, turn the ignition from OFF to ON.

Notes:
- Changing the tuning step erases all frequencies that have been recorded in the preset memory.
- A break in the battery connection or pressing the clear button returns the tuning step setting to 9 kHz.

	Specifications	Initial setting	New setting
AM	Tuning steps	9 kHz steps	10 kHz steps
	Frequency range	531–1,602 kHz	530–1,710 kHz

Using the Tuner Function

Press the button to change the source to tuner.
[See page 28.]
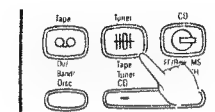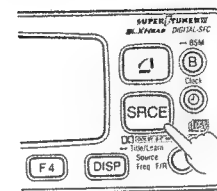
Selecting the Band
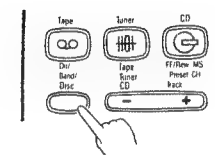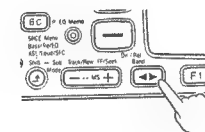
Each press of the button changes the band as follows:

FM1   FM2   FM3   AM

TUNE → TUNE → TUNE → TUNE
FM-1   FM-2   FM-3   AM
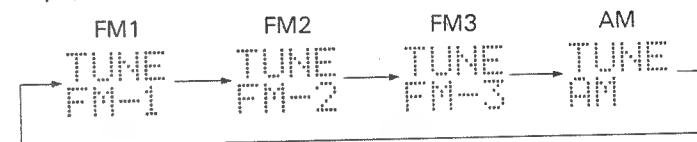
- The three FM band divisions, FM1, FM2, and FM3, have been provided to allow three different FM stations to be memorized to a single button. The reception frequency band, however, is the same for all three divisions. ["Using the Preset Memory" on page 47.]

Radio Tuning

Select the band.

[See page 46.]

Select seek tuning or manual tuning.

Pressing the button switches between seek tuning and manual tuning as follows:

Seek tuning	Manual tuning
SEEK	SEEK
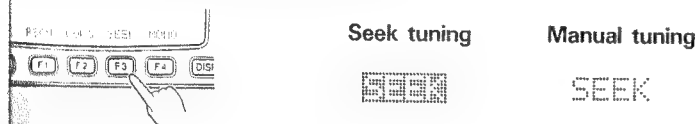
Note:

Switching between seek tuning and manual tuning cannot be performed in a volume-tone control mode. Be sure to turn this mode off before switching the tuning mode. [See "Selecting the Volume-tone Control Mode" on page 14.]

Tune in the desired station.

Seek Tuning

When the button is pressed, seek tuning begins searching for a station, then stops when it finds one.

Manual Tuning

To lower the frequency

To raise the frequency

(Holding the button down changes the frequency at high speed.)

Seeking a lower frequency

Seeking a higher frequency

(Press again to cancel seek tuning.)

AM

TUNE
AM

FM3, have been provided ... ized to a single button. ... e for all three divisions.

The frequency changes in 50-kHz steps in the FM band and in 9-kHz steps in the AM band.

Note:

The tuning step in the AM band changes to 10 kHz when the procedure described in "Changing the Tuning Step" on page 46 is performed.

Using the Preset Memory

The main unit's memory buttons 1 to 6 can be used to store desired radio stations for convenient, one-touch recall.

Note:

The preset memory cannot be used in a volume-tone control mode. Be sure the mode is off before attempting to use the preset memory function.
[See "Selecting the Volume-tone Control Mode" on page 14.]

1. Select the band.

[See page 46.]

2. Tune in the desired station.

[See previous section.]

3. Store the station in the preset memory.

Hold down the button for at least 2 seconds (two beeps will sound).

Example: Storing a station in memory button 3.

Memory buttons
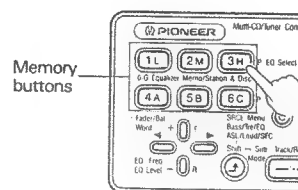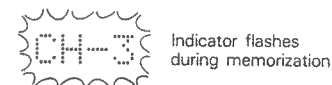
CH-3 Indicator flashes during memorization
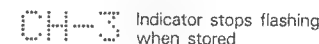
CH-3 Indicator stops flashing when stored

Hold down for at least 2 seconds.

- Holding down the button for less than 2 seconds activates the preset tuning mode. [See page 48.]
- If the selected button holds a previously stored station, the old station is erased and replaced with the new station.
- Up to 18 FM stations (six stations each for FM1, FM2, and FM3), and 6 AM stations can be memorized.

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Using Best Station Memory (BSM)

BSM automatically tunes in 6 stations with strong receptions, and stores them in memory buttons 1 to 6.
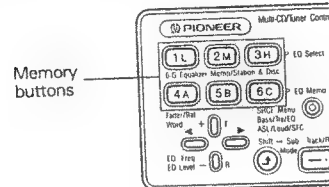
Memory buttons

1. Select the band.

[See page 46.]

2. Memorize the stations.

BSM starts
(Indicator flashes)

```
TUNE
FM-1        BSM
```

BSM ends
Station memorized to memory button 1

```
TUNE
FM-1 CH-1 107.5
```

Hold down for at least 2 seconds.

(Press again to cancel.)

- Stations with strong receptions are stored in memory buttons 1 to 6.
- When the number of stations with strong receptions is less than 6, the preset stations in the memory buttons remain unchanged.
- If there are few strong stations in the area, BSM operation continues for about 30 seconds before turning off.

Using Preset Tuning and Preset Scan Tuning

Note:
Preset tuning or preset scan tuning cannot be used in a volume-tone co mode. Make sure the mode is off before attempting to use either function. "Selecting the Volume-tone Control Mode" on page 14.]

1. Select the band.

[See page 46.]

2. Recall the desired station.

① Recalling a station using preset tuning.
Operation on the main unit:
Example: Recalling the station stored in memory button 3
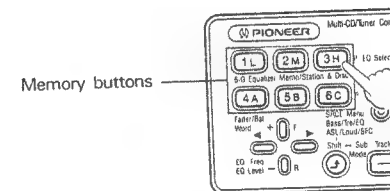
Memory buttons

- Pressing the button for more than 2 seconds activates the preset me
  [See page 47.]

Operation on the remote controller

```
6 → 5 → 4 → •••        1 → 2 → 3 → •••
```
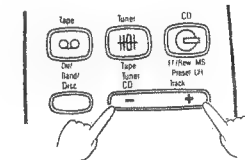
Pressing the respective side of the button changes the memory butto above order.

Recalling
set scan
isecutive
ssing the
itinues t

48

Scan Tuning

e used in a volume-tone cor
pting to use either function. I
on page 14.]

Recalling six preset stations in consecutive order using preset scan tuning.
set scan tuning recalls the stations recorded in the memory buttons in
nsecutive order for about 8 seconds each. When the desired station is reached,
ssing the button again cancels preset scan tuning, and the selected station
ntinues to play.
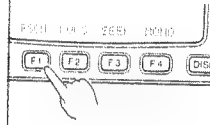
PSCN ⟶ [   ]

CH-1   Indicator flashes

nory button 3

s activates the preset mem

2 ⟶ 3 ⟶ •••

ges the memory button in

Getting Good Radio Reception

Using Local Mode

Press the button to activate the local mode and use seek tuning to tune in AM stations at night or stations with strong receptions. The local mode limits reception to only stations with comparatively strong transmission signals.

Four sensitivity levels can be selected for FM broadcasts, and 2 sensitivity levels for AM broadcasts.

- For details on seek tuning, see "Radio Tuning" on page 47.

Note:
Switching to and from local mode and changing the sensitivity level of the local mode are not possible in a volume-tone control mode. Make sure the mode is off before using these functions. [See "Selecting the Volume-tone Control Mode" on page 14.]

Changing to the Local Mode
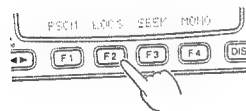
LOC.S ⟶

(Press again to turn off.)
- Pressing the button for at least 2 seconds changes the sensitivity level of the local mode. [See next section.]

Changing the Sensitivity Level of the Local Mode

1. Change the main unit to the local mode's sensitivity adjustment mode.
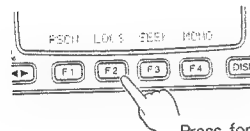
Local mode sensitivity level

Loc Level1-1

Press for at least
2 seconds.

Note:
The sensitivity level selection mode turns off 5 seconds after it has been activated. For this reason, the following procedure should be performed within 5 seconds after activation of the mode.

2. **Change the sensitivity level.**
Four sensitivity levels (Loc Level 1 to Loc Level 4) can be selected for ⊙ indi reception, and 2 sensitivity levels (Loc Level 1 and Loc Level 2) for idcasts. reception.
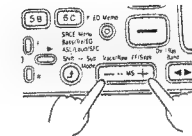
Level 4 → Level 3 → •••• 　　　Level 1 → Level 2 → ••••

For reception of
comparatively
weak stations

For reception of
comparatively
strong stations

Loc Level 1　　Loc Level 2　　Loc Level 3　　Loc Level 4

⟵ ⟶

Stereo Broadcasts

Level 4) can be selected for CD indication appears on the display during the reception of a FM stereo
evel 1 and Loc Level 2) for adcasts.

CD

el 1 → Level 2 →••••

For reception of
comparatively
strong stations

Level 3   Loc Level 4

ise in FM Stereo Broadcasts

ou feel there is too much noise in a FM stereo broadcast, push the button
wn below. The reception changes to mono and the noise level is reduced.
te:
itching between stereo and mono reception is not possible in a volume-tone
trol mode. Be sure the volume-tone control mode is off before switching the
eption mode.
e "Selecting the Volume-Tone Control Mode" on page 14.]
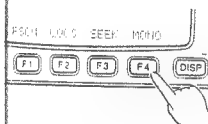
MONO ⟶ ▨▨▨▨

ss again to return to stereo reception.)

- Before making final connections, make temporary connections then operate
  the unit to check for any connecting cord problems.
- Refer to the owner's manual for details on connecting the various cords of
  the power amp and other units, then make connections correctly.
- Be sure to connect the memory power supply lead (orange) to a terminal that
  is always supplied with power regardless of the vehicle's ignition switch
  position. If this connection is made incorrectly or is forgotten, the unit will
  not work at all.
- Don't pass the orange lead through a hole into the engine compartment to
  connect to the battery. This will damage the lead insulation and cause a very
  dangerous short.
- For 2-speaker systems, wire the front output cord to the main amp.
- The separately sold digital fiber optic cable CD-D60 or a similar product must
  be used to connect the main unit with the multi-play CD player. To obtain
  the CD-D60, please contact your nearest PIONEER dealer.
- The Digital Fiber Optic Cable transmits light through its internal structure and
  therefore should not be subjected to sharp bending or high pressure. If bending
  cannot be avoided, make sure the bend does not describe a circle with a radius
  of less than 25 mm. For details, refer to the precautions included with the
  Digital Fiber Optic Cable.
- When the main unit is used in conjunction with a multi-CD/tuner control CD
  player (DEX-M88), the connection method using the Digital Fiber Optic Cable
  will differ from that shown in the connection diagram of this owner's manual.
  Refer to the connection diagram provided in the owner's manual for the DEX-
  M88 for details on the connection of units.

Upon Completion of Wiring

After wiring has been completed, use a sharp point such as a pencil tip to press
the clear button on the main unit and the multi-play CD player. [See page 3.]

Connection Diagram

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install
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Blue

Blue

Blue

To system control terminal of the power amp.

For 2-speaker systems, wire the front output cord to the power amp.

Fuse holder

White

Front out

Power amp (sold sepatately)

Red

Orange

To terminal always supplied with power regardless of ignition switch position.

Connecting cords with RCA pin plugs (sold separately)

Fuse holder

White

Rear out

Power amp (sold sepatately)

Red

Black (ground)

To vehicle (metal) body.

Digital input terminal

Red

To electric terminal controlled by ignition switch (12 V DC) ON/OFF.

Digital Fiber Optic Cable CD-D60, etc. (Sold separately)
Used to connect a multi-play CD player when it has digital outputs.

D.B. (Data Bus Line)

AUX input

Green

Black (To digital output)

Multi play CD player (sold separately)

Hide-away tuner (sold separately)

CD player (sold separately)

Used to directly connect a multi-play CD player when a hide-away tuner is not used.

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terminal of the

ys supplied with
of ignition switch

body.

nal controlled by
2 V DC) ON/OFF.

IN Front/Rear-mount:

his unit can be properly installed either from "Front" (conventional DIN Front-
ount) or "Rear" (DIN Rear-mount installation, utilizing threaded screw holes
the sides of unit chassis). For details, refer to the following illustrated installation
ethods.

te:
Use only the parts included with the unit to ensure proper installation. The
use of unauthorized parts can cause malfunctions.
Consult with your nearest dealer if installation requires the drilling of holes
or other modifications of the vehicle.
Do not use the front panel as a way of gripping the unit during installation
and wiring. The front panel may come away and the unit may drop on the floor.
If installation angle exceeds 30° from horizontal, the unit might not give its
optimum performance. (Fig. 1)

Installation with the rubber bush (DIN Front-mount)

Fig. 1

Dashboard
182
53

Holder
After inserting the holder into the dashboard, select the appropriate tabs according to the thickness of the dashboard material and bend them inwards to secure the holder in place.

Rubber bush

Screw

Frame

Frame
Install the frame with the two gaps on the bottom.

ENGLISH
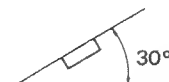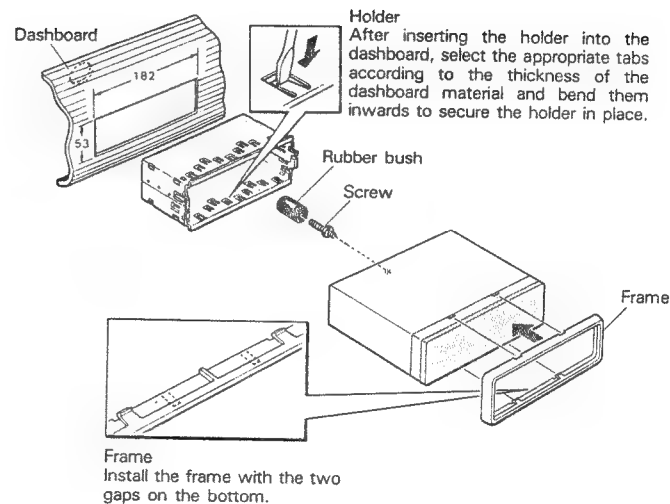
Installation without the rubber bush
(DIN Front-mount)

Dashboard

Nut (5 mm)

Drill a 5.5–6.0 mm diameter hole.

Strap
Be sure to use the strap to secure the back of the unit in place. The strap can be bent by hand to the desired angle.

Screw
(5 × 16 mm)

Nut (5 mm)

Screw

Frame
Install the frame with the two gaps on the bottom.

Frame
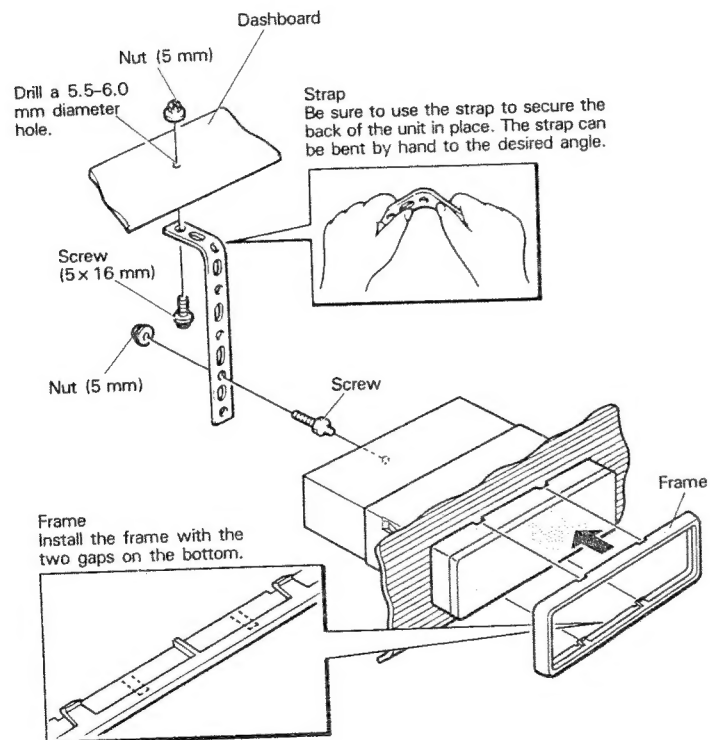
Removing the unit
(DIN Front-mount)

Insert the release pin into the hole in the bottom of the frame and pull out to remove the frame.
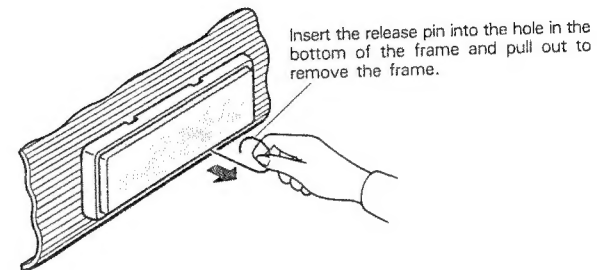
Insert till the tab of the lever catches onto the metal fixture of the unit. (Point the tab of the lever upward.) The unit can be released from the dashboard by pulling the lever.

Tab

tallatio
N Rear
emove
iove the s
astening
the screw
the screw

St
mm)
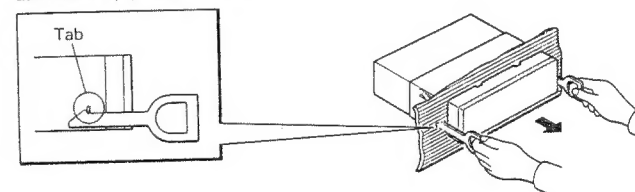
Installation using the screw holes on the sides of the unit (IN Rear-mount)

Remove the stopper.

Remove the screw (4 × 8 mm) and remove the stopper from both sides. (Fig. 1)

Fastening the unit to the factory radio mounting bracket

For the screw holes marked Ⓐ in Fig. 2, use 4 × 8 mm screws.
For the screw holes marked Ⓑ, use 5 × 8 mm screws. (Fig. 3)

the release pin into the hole in the
of the frame and pull out to
the frame.

Fig. 2

Screw
(4 × 8 mm)   Stopper

Fig. 1

Factory radio mounting
bracket

Dashbord or
Console

Fig. 3

55
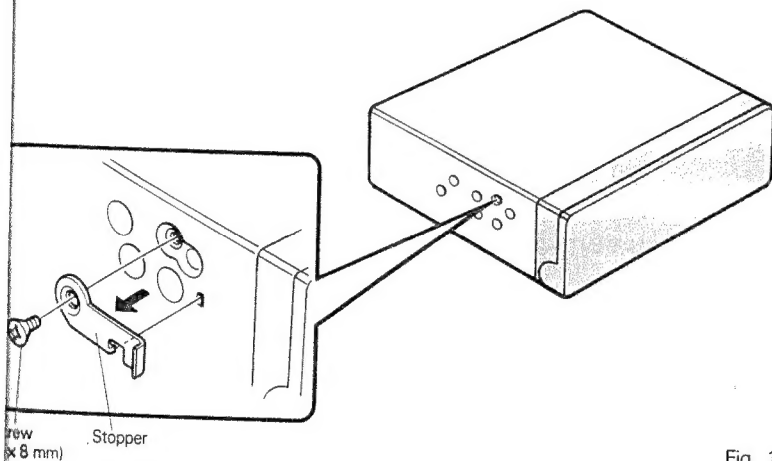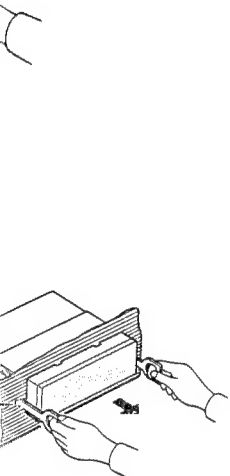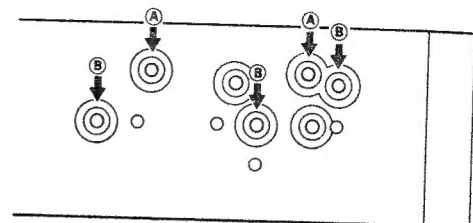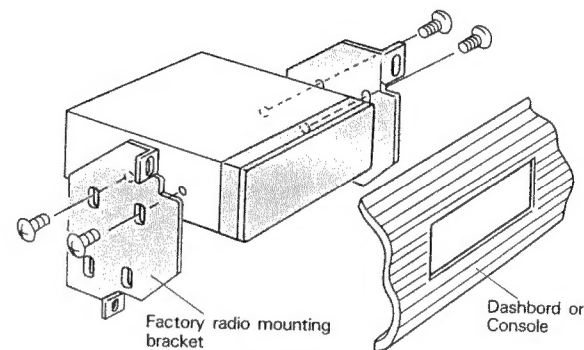
Precautions

- To assure proper operation of the unit, keep the vehicle interior temperature within a normal range using the vehicle's air conditioner or heater.
- When replacing fuses, be sure to use only fuses of the rating prescribed on the fuse holder.
- Never remove the top case of the unit to attempt check or repairs. If operation of the unit is abnormal, contact your dealer or the nearest Pioneer Service Station.

In case of trouble
When the unit does not operate properly, contact your dealer or the nearest authorized PIONEER Service Station.

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ınding sy:
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ıht . . .
e controls
ass) Freq

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ılizer
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Equalizat
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Frequenc

Equalizat
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ut output
 ut imped

56

General

Power source . . . . 14.4 V DC (10.8–15.6 V allowable)
Grounding system . . . . Negative type
Dimensions (chassis) . . . . 178(W) × 50(H) × 150(D) mm
        (nose) . . . . 178(W) × 49(H) × 18(D) mm
Weight . . . . 1.8 kg
Tone controls (parametric)
(Bass) Frequeency . . . . 63, 100, 160, 250 Hz
                                                                        ±12 dB
(Treble) Frequency . . . . 4, 6.3, 10, 16 kHz
                                                                        ±12 dB
Equalizer
(3 band parametric EQ)
   Frequency . . . .

20 Hz,	25 Hz,	31.5 Hz
40 Hz,	50 Hz,	63 Hz
80 Hz,	100 Hz,	125 Hz
160 Hz,	200 Hz,	250 Hz
315 Hz,	400 Hz,	500 Hz
630 Hz,	800 Hz,	1 kHz
1.25 kHz,	1.6 kHz,	2 kHz
2.5 kHz,	3.15 kHz,	4 kHz
5 kHz,	6.3 kHz,	8 kHz
10 kHz,	12.5 kHz,	16 kHz
20 kHz		

   Equalization range . . . . ±12 dB
(7 band EQ)
   Frequency . . . .

60 Hz,	125 Hz,	250 Hz
500 Hz,	1 kHz,	3.5 kHz
10 kHz		

   Equalization range . . . . ±12 dB
Loudness contour . . . . +10 dB (100 Hz), +7 dB (10 kHz)
                                                                (volume: −30 dB)
Preout output level . . . . 500 mV
Output impedance . . . . 1 kΩ

Tape player

Tape . . . . Compact cassette tape (C-30–C-90)
Tape speed . . . . 4.8 cm/sec. (1–7/8 ips.)
Fast forward/rewind time . . . . Approx. 100 sec. for C-60
Wow & flutter . . . . 0.06% (WRMS)
Frequency response . . . . Metal: 25–22,000 Hz (±3 dB)
Stereo separation . . . . 50 dB
Signal-to-noise ratio
   . . . . Metal: Dolby C NR IN: 73 dB (IEC-A network)
                                                    Dolby B NR IN: 67 dB (IEC-A network)
                                                    Dolby NR OUT: 61 dB (IEC-A network)

Note:
Specifications and the design are subject to possible modification without notice due to improvements.